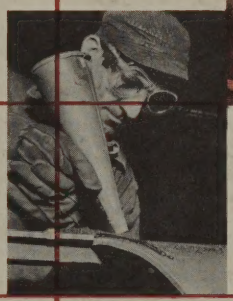
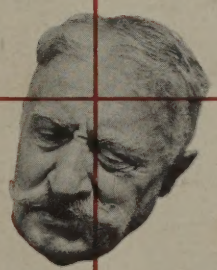
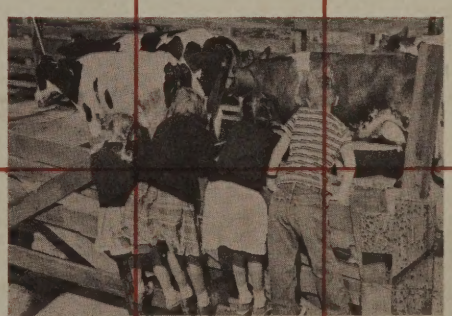


HEALTH IN CALIFORNIA





Published by
CALIFORNIA STATE PRINTING OFFICE
DOCUMENTS SECTION
N. Seventh St. and Richards Blvd.,
Sacramento, California
Price $1.50, plus tax

HEALTH IN CALIFORNIA

CALIFORNIA HEALTH SURVEY

STATE OF CALIFORNIA, DEPARTMENT OF PUBLIC HEALTH

MALCOLM H. MERRILL, M.D., DIRECTOR

2151 BERKELEY WAY, BERKELEY 4

[1957]

HEALTH IN CALIFORNIA

We present in this report, Health in California, a summary of the data compiled from the California Health Survey of 1954-1955. This was a statewide survey of health and related conditions designed to assist in public health studies and program planning.

I should like to express my appreciation to the Advisory Committee and to the staff, who have worked together with great diligence to bring the project to a successful conclusion. Credit is also due the National Institutes of Health of the Public Health Service - including members of the Study Section, Advisory Health Council and consultants - for the vision manifested by encouraging this work with a substantial grant of funds. The Bureau of the Census provided excellent service in sampling, data collection and statistical consultation. Willing cooperation by the medical profession, hospitals and medical care organizations serving San Jose contributed immeasurably to the pilot study which preceded the statewide survey. All this work was aided by the spirit of helpfulness shown by the thousands of Californians who responded to the survey questionnaire, and by other groups and individuals too numerous to mention.

We trust that the data will prove valuable in California and that our experience will be useful in connection with the current National Health Survey and with other health investigations throughout the country.

Malcolm H. Merrill, M.D.
Director of Public Health

PAGE

ADVISORY COMMITTEE

Chairman

1950-1954—Wilton L. Halverson, M.D.
State Director of Public Health

1954-Present—Malcolm H. Merrill, M.D.
State Director of Public Health

Members

Rodney R. Beard, M.D.
Professor of Public Health and Preventive Medicine
Stanford University, School of Medicine
San Francisco, California

David Frost, M.D.
Regional Medical Consultant
Office of Vocational Rehabilitation
Department of Health, Education and Welfare, Region IX
San Francisco, California (formerly Health Officer, City of Alameda, California)

Maurice I. Gershenson
Chief, Division of Labor Statistics and Research
State Department of Industrial Relations
San Francisco, California

J. Norman O'Neill, M.D.
Member, Board of Trustees
California Physicians' Service
Los Angeles, California

E. L. Place
Business Manager
St. Helena Sanitarium
Sanitarium, California

George S. Roche, Ph.D.
Chief, Research and Statistics
State Department of Employment
Sacramento, California

Edward S. Rogers, M.D.
Professor of Public Health and Medical Administration
School of Public Health, University of California
Berkeley, California

J. R. Saurwein, Jr.
Claims Manager
Blue Cross Plan of Southern California
Los Angeles, California

Charles E. Smith, M.D.
Dean
School of Public Health, University of California
Berkeley, California

Bert S. Thomas, M.D.
Medical Director
State Department of Employment
Sacramento, California

C. V. Thompson, M.D.
Member of the Council (1946-1952)
California Medical Association
Lodi, California

Francis West, M.D.
Chairman, Committee on Public Health and Public Agencies
California Medical Association
San Diego, California

Jacob Yerushalmy, Ph.D.
Professor of Biostatistics
School of Public Health, University of California
Berkeley, California

STAFF

Lester Breslow, M.D., M.P.H., Chief
Bureau of Chronic Diseases

Robert M. Drake, M.D., M.P.H., Chief
Chronic Disease Epidemiology Center

Mary Elizabeth Laughlin, M.S., Analyst
California Health Survey

Thelma F. Batten, Ph.D., Analyst
California Health Survey

Marguerite S. Augustine, M.P.H., Editorial Consultant
Bureau of Health Education

H. William Mooney, Ph.D., was supervisor of the California Health Survey in charge of the planning and processing phases of the work until the summer of 1956. In addition, the following professional staff participated in the Morbidity Research Project which culminated in the California Health Survey: Arthur Weissman (in charge of the San Jose pilot study), George I. Allen, Nedra B. Belloc, Beverlie Martin, Leon Regelson.

Miriam Haglund
Jean Johnson
Norman Perkins
Beatrice Pollack
Emi Yoshii

CONSULTANTS

Valuable consultation to the project was provided by:

Bureau of the Census, Statistical Research Division
Harold Nisselson
Katherine Capt

Public Health Service, Division of Public Health Methods
Theodore D. Woolsey

National Heart Institute
Felix E. Moore, Jr.

School of Public Health, Biostatistics Division, University of California
William R. Gaffey, Ph.D.

CHAPTER 1

INTRODUCTION

CHAPTER 1

INTRODUCTION

The attainment of health is becoming a major concern in present day society. Mankind is rapidly assuring itself of the main physical conditions for survival—adequate food, clothing, and shelter. As this is accomplished, optimum well-being comes into focus as a paramount goal. Those nations which have been most successful in reducing the mortality rate and thus prolonging life are now turning their attention to the control of illness in a longer-lived population.

Need for Illness Data

A basic aspect of the scientific approach to improvement of health is measurement of the amount and distribution of illness in the total population. Until recent years such quantitative knowledge of illness was limited to the information which could be derived from death certificates, from quite incomplete reports of communicable diseases and from fragmentary data in hospital records and insurance programs. The need for a more adequate measure of illness as it affects the whole population is becoming urgent for the further advance of public health.

Planning in the field of health requires that we have information to rank diseases according to their relative importance as causes of illness, to identify population groups in which illness is concentrated, and to forecast the future trends of illness. Knowledge of current morbidity experience in relation to medical care will help guide the development of hospitals and related health facilities and services. Data on the extent of illness and use of health services among various population groups will facilitate progress in medical economics.

Awareness of the association between types of illness and age, sex, occupation, income level, and other characteristics of people may suggest hypotheses for research into the causation of disease. It also permits those concerned with preventive medicine to concentrate their efforts on segments of the population which carry the greatest risk for certain diseases. The effect of illness on manpower and its utilization is attaining greater importance not only because of current sickness absenteeism and its associated economic loss, but also for projecting labor force characteristics in respect to aging and other aspects of population change.

California's Interest

California's specific concern with obtaining information about illness in the general population grew out of a 1947 directive from the Legislature to the State Department of Public Health to investigate chronic illness in the State. The absence of any except the most fragmentary data impeded this work at every turn. Reliable information was needed to answer such questions as: What are the major causes of chronic illness in California? Which segments of the population suffer most severely? How much time is lost from work because of arthritis and rheumatism, heart disease, and chronic respiratory conditions? How does chronic illness affect the utilization of hospitals?

Not only were data lacking on these questions but considerable uncertainty prevailed as to the most appropriate methods for collecting the data. What use could be made of information from disability insurance programs and medical care plans? Was a general population sample desirable? How much reliance could be placed upon household interviews as a source of information about illness?

As the Department examined these problems it became apparent that information about the occurrence of all types of illness in relation to characteristics of the State's residents would serve many public health interests, besides chronic disease control. For example, work toward preventing the common diarrheal and respiratory diseases was impeded by a lack of understanding of their distribution throughout the State among various groups of the population and in various seasons.

Further progress in improving maternal and child health depended upon a clearer knowledge of illness among children and among women during the child bearing period. The relation of occupation to health needed elucidation. Prevention of accidents, at home and elsewhere, was another public health problem for which basic source data were woefully inadequate.

Further consideration led to a realization of the value which information about illness in the total population would have for other departments of State Government, such as: the Department of Employment, which administers the disability insurance program and must estimate the effect of various proposed changes in that program; the Department of Industrial Relations, which compiles and analyzes labor statistics, and administers workmen's compensation; the Department of Social Welfare, which is concerned with the role of illness and disability as a factor in public assistance, particularly for the aged; and the Department of Education, which administers the vocational rehabilitation program and a school program for the handicapped. All of these state program interests would benefit from data concerning the amount and distribution of various types of illness in the population.

In 1950, with a research grant from the National Institutes of Health, the California State Department of Public Health began a project to evaluate selected methods of securing current general morbidity data and to develop methods suitable for statewide application in securing morbidity data of the types required for the planning of public health programs. Financial support was granted the department because it was evident that a plan for establishing such a morbidity service would be applicable in other states and for the Nation as a whole, as well as in California.

Related Investigations Elsewhere

One of the first general morbidity studies was in 1922-1924 when Sydenstricker conducted an investigation of the health of the entire population of Hagerstown, Maryland, through household interviews of a sample of the population. The National Health Survey (U. S.) of 1935-1936 represented the first nationwide effort to obtain information about the health of the entire population. In 1943 Great Britain inaugurated a continuing morbidity survey among its people but discontinued it in 1952. This survey differed from the two previous studies mentioned in that persons were interviewed for themselves, rather than using a single household informant.

Recent advances in population sampling and interviewing techniques have provided the basis for more reliable work in this field than was possible in these earlier studies.

At about the same time that California initiated its morbidity studies, Denmark and Canada also undertook sickness surveys. Subsequently, the Commission on Chronic Illness sponsored studies of illness in Hunterdon County, New Jersey, and Baltimore, Maryland. Also an investigation of illness in Greater Kansas City, Missouri, was launched in 1955.

These are a few of the morbidity studies being conducted in order to better measure the amount and distribution of illness in the total population. Each such survey will increase not only the knowledge of the health status of the community but should improve the techniques for obtaining these data.

Start of California's Project

The initial step in the California study was to appoint a project advisory committee of persons representing the interests of the California Medical Association, California Physicians Service, California Hospital Association, University of California School of Public Health, Conference of Local Health Officers, State Department of Industrial Relations, and the State Department of Employment. This committee guided the work from its inception to its conclusion.

The total project developed in two phases: (1) a pretest on a pilot basis of various methods of measuring illness; and (2) the statewide application of methods shown to be appropriate for obtaining needed morbidity and related population data.

In the statewide survey the Bureau of the Census collected data by a household interview (in the name of the California State Department of Public Health) from a probability sample, designed by the Bureau of the Census, of the civilian population of California. The Department retained responsibility for defining survey objectives, defining concepts relating to morbidity, collecting related data, coding and processing data, carrying out analyses and for interpretation and publication.

Fundamental Issues

Two fundamental issues arose during the early planning:

1. How shall illness be defined for purposes of measurement?
2. What are the advantages and limitations of the household sample survey method for obtaining data about illness?

1. The term illness covers a wide range of conditions. At one end of the range is asymptomatic disease, e.g. the undetected case of diabetes, which causes no symptoms and has not become manifest in any way. Next comes illness of which the person is aware but which does not affect his behavior; he does not change his usual activities nor does he seek medical attention because of it, e.g. a mild intestinal upset. Further along the range occurs illness which affects behavior in one or both of two directions: (1) it may cause the person affected to seek medical attention, perhaps including hospitalization; (2) whether or not medical attention is sought, the illness may cause varying degrees of interference with usual activities—giving up social functions, staying home from work or school, going to bed. Finally, at the other extreme, are illnesses which terminate in death.

In order to provide broad coverage of morbidity in the general population, a person was defined as being ill if he reported he was ill. Information was thus sought about illness for which neither hospital nor medical care was obtained, and which did not result in any disability. In addition, securing information about disability, medical attendance and hospitalization made it possible to classify illness according to various indices of severity.

2. Studies which consist of the systematic collection of data from a population by personal interviews or other data gathering methods are called surveys. When a survey deals with a representative fraction of a total population, it is called a sample survey. The household sample survey, in which information is obtained by personal interview about all members of a sample of households, received particular attention early in the project.

Advantages

A household sample survey appeared to offer several important advantages in obtaining illness data for the general population. *First*, when the cost or time involved in securing information about every person is prohibitive, a properly designed sample is, within measurable limits, representative of the total population. *Second*, by providing a measure of population at risk, it can furnish a basis for determining frequency rates for the conditions and characteristics being studied. *Third*, since even disabling illness does not always come to medical attention, the way to obtain the broadest possible picture of illness in the total population would seem to be to ask the people themselves about their illnesses. *Fourth*, information from those having an illness (or respondents in the same household) seems to be the best source for determining what people do about illness—for example, whether they seek medical attention or lose time from their usual activity.

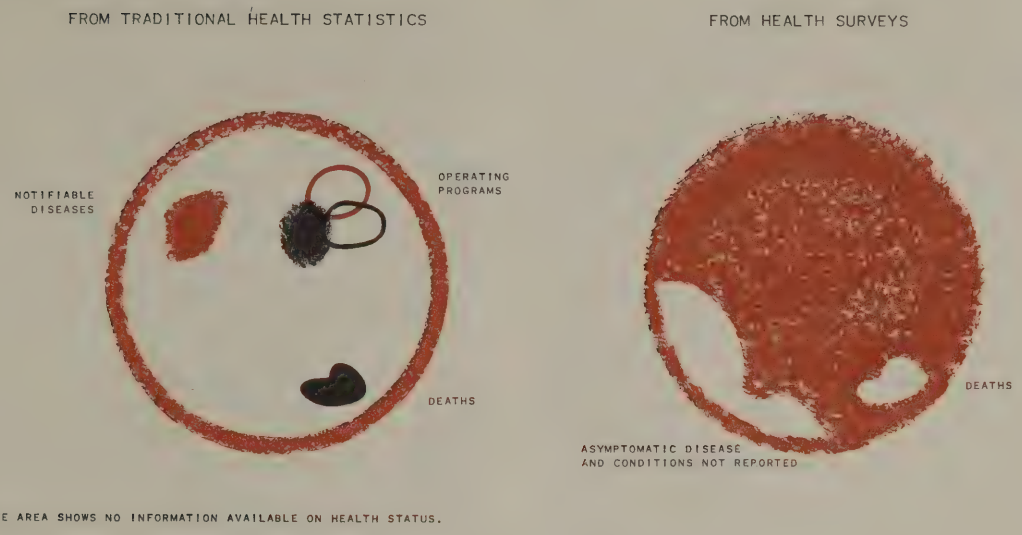
Limitations

A major limitation of any method relying on people's answers to questions is the extent to which respondents are willing or able to give correct information. Information about any illness which the individual believes might discredit him is not likely to be accurately reported. Thus, reliable estimates of the amount of such illness as syphilis can probably not be derived by personal interviews. Also, a household survey using a personal interview will not obtain information concerning asymptomatic disease. Since the person does not know about it, he naturally will not report it while being interviewed. For data on asymptomatic disease, personal interviews would need to be supplemented by screening tests or physical examinations. Finally, specific diagnostic terms may not be accurately known or given by an individual. Therefore, estimates for specific diagnoses will generally be less reliable than estimates for broad diagnostic groups.

Exploratory Study in San Jose

San Jose and an adjacent rural area were selected as the locale for the first phase of the project—resolving fundamental issues and evaluating the major alternative methods of securing illness data. The latter included: (1) methods of obtaining data on illness and disability from population surveys based on household sampling methods, and, (2) methods of obtaining data from currently operating programs.

In its household sample survey aspect, the San Jose study compared the collection of data by interviewers with collection by means of a diary form maintained by a member of the household. Within this process of comparison, supplementary



studies were carried out on the effect of repeated contacts with householders, effects of alternative question wording, and the choice of appropriate respondents to furnish illness information.

In an effort to validate the information obtained by household interviews, information obtained in the household sample survey aspect was checked against that available in hospital records, physicians' office records, and medical care plans. The degree of agreement of household informant information with record information was deemed sufficient for most purposes.

The extent of diagnostic agreement between medically attended illnesses reported by household informants and by physician records was not as high as that for hospitalized illness. Agreement in terms of broad diagnostic groups was substantial, but survey data dealing with specific disease categories need to be interpreted with some care. For example, not as high reliance can be placed upon data concerning "vascular lesions affecting the central nervous system" as upon data concerning cardiovascular disease as a whole.

Study of data from operating programs—hospitals, health departments and disability insurance—revealed their important value as a supplement to data from the sample survey. General morbidity information cannot, however, be obtained from operating programs alone because operating program data pertain to selected kinds of illness occurring among selected population groups. Such data do not provide a picture of the total population experience. Also, changes in the populations and types of conditions covered by the operating programs affect the data so as to limit their usefulness for general morbidity purposes. For certain special purposes data from operating programs are highly useful, as in the vital role hospital statistics play both in planning medical care programs and in conducting epidemiological investigations.

The California Health Survey

The California Health Survey was undertaken to obtain needed morbidity and related population information on a statewide basis, and to further test the methods developed in the San Jose pilot project. It was also designed to determine the relationships between population characteristics, health status and utilization of health services, and to further develop and evaluate methods of morbidity measurement.

The Survey was conducted between May 1954 and May 1955. Each week for the 52 weeks, interviewers obtained information covering illness, population characteristics and medical care from about 200 households throughout the State. Over the year, data were obtained by personal interview from a sample of 10,000 households—about 30,000 persons. All respondents were informed that the data were being collected for the California State Department of Public Health. Interviewers recruited by the Bureau of the Census received special training in the use of the California Health Survey questionnaire. Bureau of the Census field staff closely supervised their work. Completed questionnaires were forwarded to the State Department of Public Health for immediate processing.

The questionnaire started with very general questions as to whether household members had been sick or had any accidental injuries during the time period covered by the interview, or had any chronic conditions or impairments. Since this type of general questioning was known to lead to undercoverage of conditions not currently causing trouble, it was supplemented by inquiries concerning taking medicines or treatment for illness, visits to doctors, hospitalizations, and by asking about a number of specific chronic conditions and symptoms of chronic conditions.

A number of specific questions were asked for each condition reported to determine the diagnostic nature of the condition, whether medical attendance was obtained, and the extent of disability (if any) in the four weeks preceding the week of interview. For chronic conditions additional information was obtained on disability during the preceding year and on the relative frequency of visits to doctors or taking medicines or treatment. The interviewers had been instructed to obtain sufficient detailed diagnostic information so that diagnoses could be coded at the full four-digit level of the International Statistical Classification.

Thus information was obtained about illness for which neither hospital nor medical care was obtained and which did not result in disability, as well as about illness which was more severe in nature. The intent was to cover as much of the range of illness as possible.

In each household the interviewer asked every member who was at home (and over 18 years old) for information about himself. Parents provided information about children under 18, while information about absent adult household members was obtained from a relative in the household who knew about the health of the absent person.

Information was obtained from 96.2 percent of the households containing members eligible for interview in the Survey. Of the 3.8 percent of households from which information was not obtained, 1.4 percent refused to co-operate, while the remaining 2.4 percent of household nonresponses were due to absence for the duration of the Survey, difficulty in finding anyone at home after repeated calls, and other reasons.

To check the representativeness of the sample population, estimates for several demographic characteristics of this population were compared with independent estimates for the State of California and most were found to be within sampling fluctuation. The characteristics compared were age, sex ratio, race, marital status, usual activity, family income, and geographic distribution. Table 3 in Appendix E presents these comparisons.

As the Survey progressed, a few modifications were introduced. During the final three months, the interview was expanded to include some items in which there was particular interest, such as physician visits and home nursing care. Adding such items to the questionnaire took advantage of the flexibility of the household survey technique for obtaining data and cost relatively little.

CHAPTER 2

CALIFORNIA'S POPULATION

CHAPTER 2

CALIFORNIA'S POPULATION

Introduction

This chapter presents briefly the history of population growth and distribution in California, and the present composition of California's population as shown by the California Health Survey.

Adequate interpretation of morbidity data requires knowledge of the population and its characteristics as a background against which illness patterns may be viewed.

Those engaged in the planning and administration of health services, in preventive medicine, and in epidemiological investigations need to know the current distribution of the total population into its various segments. They also need to know what that distribution is likely to be in the future. Only with this information, coupled with knowledge of the amounts and kinds of illness and medical care in these various population segments, can health personnel function most effectively. If health administrators are to organize services so that they may best meet the needs of the people, they must be aware of the distribution and kinds of people requiring particular types of services. Public health workers want to know what sorts of people are most likely and what least likely to obtain medical care when they are ill, so that they may better direct their educational efforts. Workers in preventive medicine need to know in which population groups (by age, sex, income, occupation, or other) preventable illness is concentrated in order that they may focus their efforts on those segments of the population which are most affected.

The epidemiologist studies the pattern of illness in the population in seeking clues as to the causation of disease. Before he can proceed to investigate why some population groups have more or less of a particular disease than other groups, he must know both the distribution of illness within these groups and the distribution of these groups within the general population. For instance, if he notes that about 20 percent of the people with a certain chronic condition are divorced persons, he does not know whether divorced persons have a higher rate for this condition than might be expected unless he knows how many divorced persons there are in the population. Circumstances of life surrounding the fact of being divorced may warrant further investigation in relation to this specific condition depending on whether divorced persons constitute 5, 20, or 40 percent of the population as a whole. Furthermore, if the epidemiologist does establish that divorced persons have a high rate for this chronic condition, then he will want to know whether the proportion of such persons has been increasing, decreasing, or remaining constant.

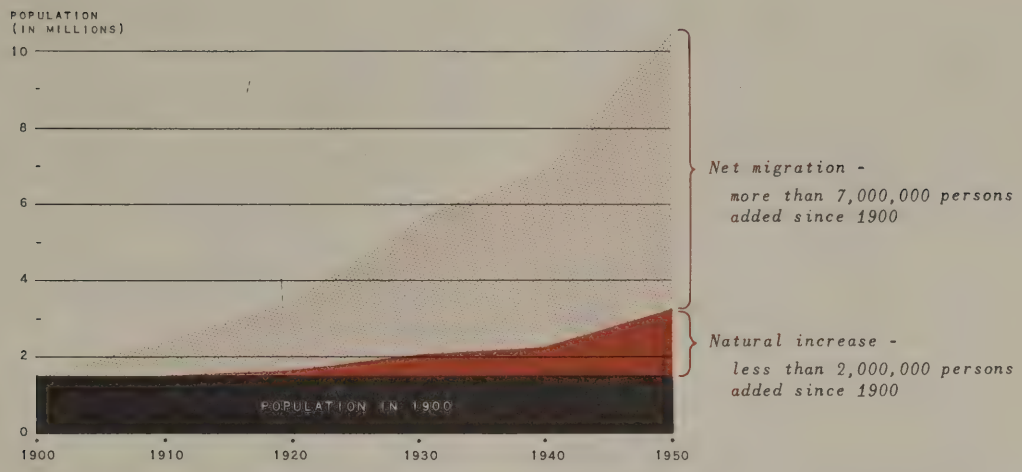
In order to facilitate these and similar uses of morbidity data, the California Health Survey obtained information on some population characteristics known to be related to differences in illness patterns or suspected of being related. The characteristics which are discussed in this report include age, sex, race, marital status, usual activity, family income, migrant status, and health insurance coverage. (For complete definitions of these characteristics, see Appendix B, Definitions of Terms.) Information was also obtained on veteran status, occupation and industry, household composition, and smoking practices.

Population Growth[1]

By the time the Survey began in 1954, California's population had reached a total of 12½ million. This represents a 24 percent increase over 1950, and almost an 80 percent increase over 1940 when the census recorded seven million persons in the State.

The number of California residents has increased more than seven-fold since 1900 while that of the United States has barely doubled. In no decade since 1900 has California's population failed to

[1] *This section and the following chart are based primarily on Warren S. Thompson, Growth and Changes in California's Population. The Haynes Foundation, Los Angeles, 1955.*



grow about three times as fast as that of the Country as a whole.

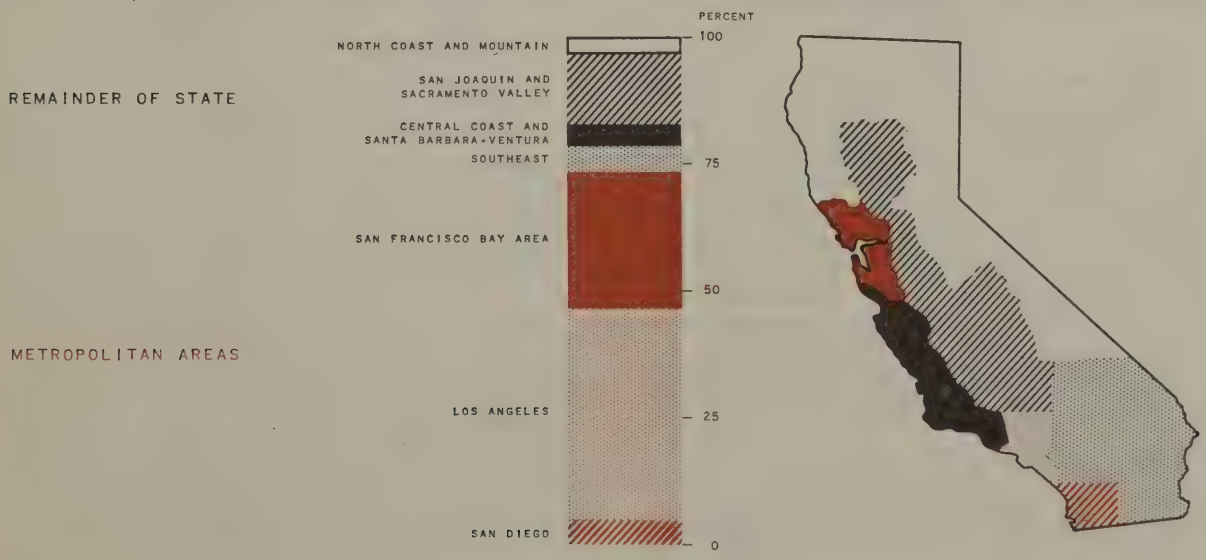
Change in population size, distribution, and composition depends on the relationship of the number of births to deaths, and on migration. So far in California's history, migration has played the major role in the expanding population; natural increase (excess of births over deaths) has been less important. California long had a lower birth rate than did the rest of the Country. Only in the last decade has her birth rate been as high as that of the Nation. Now that California, like the United States as a whole, has recently experienced a rise in the birth rate, natural increase may become a relatively more important factor in the State's future population growth.

Geographic Distribution

Of the 58 counties in California, the lowest in population contains only a few hundred people while the highest includes over 5 million. Population in California has always favored the coastal areas—at first the region around the San Francisco Bay, and after 1900, the Los Angeles area and southward to the Mexican border.

California's people not only concentrate along the coast, they cluster in a few coastal urban centers. By 1954, almost three-quarters of the people lived in three major areas: San Francisco, Los Angeles, and San Diego. The San Francisco Bay area is defined, for purposes of this report, as including the following counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma; the Los Angeles area encompasses Los Angeles County and Orange County; while the San Diego area contains the county of that name.

The most important change in the geographic distribution of population in California during the



last few decades has been taking place within these metropolitan areas. A decreasing proportion of people live in the central city and an increasing proportion in the periphery of the city, the suburbs. This change has occurred largely because of the ease of movement between urban and rural areas afforded by the automobile. People now are able to work in the central city but live some distance away in the suburbs ringing the city, which are more attractive for residence. This has resulted in a movement of people who formerly lived in the city toward the periphery. In addition, there has been a movement of people from rural areas and small towns to the suburbs in order to work in the city.

This change in the distribution of population within the three major centers carries many implications for health planning. New facilities such as hospitals must be built to serve the increasing population in the suburbs, while facilities and services already developed in the central cities must adjust to loss of the population which they formerly served and to the change in characteristics of those who remain.

Present Composition

The information about California's population in 1954 which follows in this monograph, was obtained from the California Health Survey. The Survey consisted of a sample of the resident population of the State, exclusive of persons living on military posts. This exclusion is a sizable one, estimated at 300,000 persons. Although a small sample of the institutionalized population was obtained, all figures presented in this monograph refer to the noninstitutional population only. Data are not presented for persons residing in homes for the aged and infirm; inmates of penal institutions; nor patients in mental institutions, tuberculosis sanitaria and similar places. This excluded civilian institutional population consisted of approximately 125,000 persons in 1954. The fact that a large proportion of these persons were in institutions because of long-term illness must be taken into account when interpreting morbidity data from the Survey.

For comparative purposes certain data about California at earlier times and about the United States are taken from special population reports prepared by Dr. Carl M. Frisén of the California State Department of Finance and from the United States Census Bureau publications.

CALIFORNIA HEALTH SURVEY, 1954-1955

	TOTAL POPULATION	
	Number in Sample	Percent
Total, All Ages[1]	31,831	100.0
Male	15,511	48.7
Female	16,320	51.3
Total, 15 Years and Over[1]	22,611	100.0
Male	10,766	47.6
Female	11,845	52.4
Total, All Ages	31,831	100.0
0-14 Years, Total	9,220	29.0
Male	4,745	14.9
Female	4,475	14.1
15-44 Years, Total	13,324	41.9
Male	6,246	19.6
Female	7,078	22.2
45-64 Years, Total	6,630	20.8
Male	3,256	10.2
Female	3,374	10.6
65 Years and Over, Total	2,624	8.2
Male	1,254	3.9
Female	1,370	4.3

[1] Includes not ascertained.

Age and Sex

In the past, California has had a larger proportion of male residents and of people in the young adult years than has the Nation as a whole. In recent years, the State has become more like the rest of the United States in its age-sex composition. The notion is widespread that California is gaining large numbers of older persons through migration, but state and national estimates indicate that the proportion of the State's total population 65 years old and over in 1954 was about the same as that of the Nation.

Nativity and Race

People born outside the State have long comprised a considerable majority of California's population. In 1954, only about 15 percent of California's population consisted of persons over 14 years of age who had lived in the State since birth. Large numbers of migrants have come from all parts of the United States. In addition, since about 1920 California has had a fairly large in-migration from Mexico, as have the other states bordering that nation.

Prior to 1940, most of California's nonwhite population was composed of Asiatics. Since 1940, however, the proportion of Negroes in the State has risen substantially. In 1940, about 2 percent

CALIFORNIA HEALTH SURVEY, 1954-1955

	RACE				
	Total[1]	White[1] (Excluding Spanish Surname)	Spanish Surname	Negro	Other
	NUMBER IN SAMPLE				
Total, All Ages	31,831	27,406	2,154	1,726	545
Male	15,511	13,313	1,091	830	277
Female	16,320	14,093	1,063	896	268
	PERCENT				
Total, All Ages	100.0	86.1	6.8	5.4	1.7
Total, All Ages	100.0	100.0	100.0	100.0	100.0
Male	48.7	48.6	50.6	48.1	50.8
Female	51.3	51.4	49.4	51.9	49.2

[1] Includes not ascertained.

of the population consisted of Negroes, while by 1954 the proportion had increased to slightly over 5 percent.

In 1954, about 14 percent of all Californians had Spanish surnames or belonged to the Negro or other nonwhite races. Members of these groups were more often males and younger than the rest of the population.

Family Income

Approximately one-eighth of the State's residents were members of families with less than $2,000 annual income, while the bulk of the population was equally divided between families with incomes in the range of $2,000-$5,000 and families with more than $5,000 annual income. About one-half of all persons over 65 years of age fell into the lowest family income group of less than $2,000 per year.

California's income picture compares favorably with that for the United States. In 1954 the Nation had more than twice as high a proportion of its people in the income bracket, "less than $2,000" than did California. At the other end of the income scale, 31 percent of the national population and over 40 percent of Californians were in the income brackets, "$5,000 or more."

CALIFORNIA HEALTH SURVEY, 1954-1955

	FAMILY INCOME			
	Total[1]	Less Than $2,000	$2,000-4,999	$5,000 and Over
	NUMBER			
Total, All Ages	31,831	3,873	13,040	13,578
Male	15,511	1,656	6,407	6,818
Female	16,320	2,217	6,633	6,760
	PERCENT			
Total, All Ages	100.0	12.2	41.0	42.7
Total, All Ages	100.0	100.0	100.0	100.0
Male	48.7	42.8	49.1	50.2
Female	51.3	57.2	50.9	49.8

[1] Includes not ascertained.

Marital Status

Except for divorced persons, California's marital status picture resembled that of the Country as a whole. In 1954, California had about two and a half times as high a proportion of divorced persons in the population 15 years old or older as did the United States (5.9 percent compared to 2.2 percent).

Beginning early in the 1940's, the proportion of married persons under 35 years old rose substantially in California's population as it did in that of the Nation in general. This rise was followed by the increase in the birth rate which was mentioned earlier. By 1954, of all Californians 15 years old or older, 71 percent were married, 16 percent had never been married, and the remaining 13 percent comprised persons who were currently divorced, separated from spouses, or whose marriages had been annulled, or whose spouses had died. (For brevity, the correct but unusual term "widowed" is used in this report for both males and females whose spouses have died and who have not remarried.)

It is well known that women are longer lived than men, and so it is not surprising that most of those persons whose spouses are dead are women. Perhaps not so well known is the fact that, except for the oldest age group, women also predominate

CALIFORNIA HEALTH SURVEY, 1954-1955

	MARITAL STATUS				
	Total[1]	Married	Widowed	Divorced Separated or Annulled	Never Married
	NUMBER IN SAMPLE				
Total, 15 Years and Over	22,611	16,037	1,676	1,334	3,514
Male	10,766	7,990	344	509	1,903
Female	11,845	8,047	1,332	825	1,611
	PERCENT				
Total, 15 Years and Over	100.0	70.9	7.4	5.9	15.6
Total, 15 Years and Over	100.0	100.0	100.0	100.0	100.0
Male	47.6	49.8	20.6	38.2	54.2
Female	52.4	50.2	79.4	61.8	45.8

[1] Includes not ascertained.

CALIFORNIA HEALTH SURVEY, 1954-1955

	ACTIVITY STATUS				
	Total[1]	Worker	Housewife	Unable to Work	Something Else
	NUMBER IN SAMPLE				
Total, 15 Years and Over	22,611	11,892	6,997	555	1,801
Male	10,766	8,321	-	392	1,330
Female	11,845	3,571	6,997	163	471
	PERCENT				
Total, 15 Years and Over	100.0	52.6	30.9	2.5	8.0
Total, 15 Years and Over	100.0	100.0	100.0	100.0	100.0
Male	47.6	70.0	-	70.6	73.8
Female	52.4	30.0	100.0	29.4	26.2

[1] Includes students and not ascertained.

among those persons whose marriages are currently broken by divorce, separation or annullment. Evidently males who experience a broken marriage have a higher remarriage rate and/or mortality rate than do their female counterparts.

Usual Activity

Among all Californians who are at least 15 years old, about half reported themselves as "working outside the home," and the great majority of these were men. Less than 4 percent of all workers were 65 years of age or older, although this age group included more than 8 percent of the population. This discrepancy at least partly reflects the widespread practice of compulsory retirement at about age 65.

In addition to the 53 percent of the population 15 years of age and over who reported themselves as workers, 31 percent said they were housewives, not quite 3 percent said they were unable to work because of long term illness, and 8 percent were classified as "something else." Most of the persons in this last group were men who had retired. The remainder of the population 15 years and over were either students or the activity status was not ascertained.

Migrant Status

The classification according to "migrant" status which is used here is not a standard one; it is based on when a person *last* moved to California. Some people who were born in California (the usual definition of a "native Californian") might have lived outside the State for a time and then returned. These people would be classified according to when they last returned to live in California.

Table 2 in Appendix E shows the population in various demographic groups, by age and sex. From that table, it is evident that the majority of persons who have never lived outside California are under 15 years of age. Many of these persons are undoubtedly children of former migrants. For this reason, it seems best to compare only persons aged 15 years or older in the three migrant status groups—"Never lived outside California," "Last moved to California before 1946," and "Last moved to California 1946 and after."

Almost 50 percent of all Californians at least 15 years old last moved to California before 1946. This group contains a larger proportion of aged persons than do the other two groups—17 percent are 65 years old and over, compared to about 6 percent in each of the other two groups. Fairly recent migrants to California (those who last moved to California in 1946 or later) have an age distribution which is very close to that of persons who have never lived outside California. Not only are the proportions of aged persons about the same, but both groups consist primarily of young adults. In both groups, persons aged 15 to 44 years comprise about 75 percent of the total number 15 years and older.

Like migration everywhere, the movement of people to California responds rather sensitively to economic conditions. According to the California State Department of Finance, which is responsible for the population estimates and forecasts used by all departments of our State Government, the high level of economic activity present in California at the time of this Survey is expected to continue in the near future, and the State will probably continue to gain around 500,000 persons annually for at least a few years. Tables 1 and 2 in Appendix E show the number and percent of the population by age, sex, and demographic characteristics.

CALIFORNIA HEALTH SURVEY, 1954-1955

	MIGRANT STATUS			
			Last Moved to California	
	Total[1]	Never Lived Outside California	Before 1946	1946 and After
	NUMBER IN SAMPLE			
Total, 15 Years and Over	22,611	4,948	11,003	6,568
Male	10,766	2,359	5,248	3,105
Female	11,845	2,589	5,755	3,463
	PERCENT			
Total, 15 Years and Over	100.0	21.9	48.7	29.0
Total, 15 Years and Over	100.0	100.0	100.0	100.0
Male	47.7	47.7	47.3	47.6
Female	52.3	52.3	52.7	52.4

[1] Includes not ascertained.

GLOSSARY

CONDITION. Any type of disease, injury or impairment reported by the informant in the form of a diagnosis, a group of related symptoms or a single symptom.

CHRONIC CONDITIONS. In addition to heart disease, asthma, diabetes, etc., which usually are classed as chronic, in this survey chronic conditions also include any conditions which have lasted three months or longer or which the informant states have been recurrent.

ILLNESS. Any condition, as outlined above, which was reported to "bother" the person during a four-week period. "Bother" is defined in this survey as disturbing the state of health of an individual. Inquiries about illness pertained to the four-week period preceding the week of interview.

CHRONIC ILLNESS. Any chronic condition which was reported to "bother" the person during a four-week period.

ACUTE ILLNESS. Any nonchronic condition which was reported to "bother" the person during a four-week period.

INCIDENCE OF ILLNESS. The number of illnesses which began during a four-week period expressed as a rate.

DISABLING ILLNESS OR CONDITION. Any illness or condition which kept a person in bed (either at home or in a hospital), prevented him from going out of doors, or otherwise interfered with his usual activities.

DAYS OF DISABILITY. The number of days in the four-week period preceding the week of interview on which a person reported disability. (See definition for disabling illness or condition.)

NOTE: For those cases where a person experienced days of disability because of several illnesses simultaneously, the number of overlapping days of disability was divided by the number of illnesses. This procedure enables us to estimate the total number of days of disability per person but results in a slight underestimate of days of disability per illness.

CHAPTER 3

THE SPECTRUM OF HEALTH

CHAPTER 3

THE SPECTRUM OF HEALTH

Introduction

One has little difficulty distinguishing between life and death, but the distinction between illness and health is not an easy one to make. Except for certain acute illnesses the transition from health to ill health is often almost imperceptible.

A useful approach is to view health as a spectrum. This spectrum ranges from perfect health to the complete absence of health, or death. Between these two extremes there is little agreement on criteria for differentiating various degrees of ill health. Nevertheless, the need to make these distinctions has been growing in recent years, both with advances in the understanding of disease and with the development of programs for aid to persons affected by diseases or impairments.

Spectrum for Conditions

As applied to conditions, the spectrum ranges from asymptomatic stages to conditions serious enough to result in death. The California Health Survey does not cover the entire spectrum of conditions. The principal omissions are the two extremes: asymptomatic disease and illnesses terminating in death.

A household survey is not an appropriate instrument to gather either of these types of information. For data on asymptomatic disease, physical examinations or screening tests are necessary. As for terminal illnesses, a major difficulty is that many persons with such illnesses are elderly and live alone. These one-person households would be dissolved with the death of their solitary members, leaving no one of whom questions could be asked.

In the part of the spectrum which is covered by the California Health Survey, illnesses or chronic conditions may be classified along either or both of two dimensions of effect: the amount and kind of medical attention required, and the amount and kind of disability caused. Conditions may affect an individual merely to the extent that he is vaguely aware of them. If more severe, they may cause him to omit some of his customary social activities, to require help in getting around, or to spend time in bed, either at home or in a hospital. Such interference with usual activities may exist for short or long periods of time.

Spectrum for Persons

As applied to persons, the spectrum ranges from a state of optimum mental, physical, and social well-being to death. Within the part of the spectrum covered by this survey, the two dimensions of effect described for conditions apply to persons as well: the amount and kind of medical attention required, and the amount and kind of disability caused.

Because persons may have combinations of conditions, classifying persons along the spectrum presents more problems than does classifying conditions. Persons may experience the same degree of interference with their usual activities as a result of one of three possible situations. In one of these, persons may each have a single condition and be equally affected by it. Or, one individual may have a combination of conditions which affects him to the same degree that another individual is affected by a single condition. Finally, two individuals may have different combinations of conditions, but be equally affected by these combinations.

Ways of Dividing the Spectrum

When an investigation of health is carried out, some critical points along the spectrum must be selected which will divide the persons or conditions into distinct groups. Since this selection of points is at least partly arbitrary, the dependence of reported morbidity rates on this selection should be kept in mind.

Whether the primary concern is with episodes of illness, or with chronic conditions, some indication of the effect of the illnesses or conditions is desirable.

Illnesses were defined in the survey as those conditions currently bothering an individual, i.e. in the four-week period preceding interview. They may have recently started for the first time, or have been a flare-up of a chronic condition.

To minimize "forgetting" of episodes of illness, particularly minor episodes, all survey inquiries about illness were limited to the four weeks preceding the week of interview. Those illnesses which began during the four-week period were

used to derive incidence rates.[1] These figures show the rate at which new episodes of illness were added to the total of all illnesses existing during the period.

Two measures of effect were used for illnesses. Those which began during the period were divided according to whether or not they caused any disability during the period, i.e. into disabling illness and nondisabling illness. In addition, the total number of days of disability during the period was obtained for all illnesses, whether they began before or during the period.

Chronic conditions were defined as all conditions existing during the 12 months preceding the week of interview and which were recurrent, lasted three months or longer, or would usually be classed as chronic, e.g. heart disease. They may have begun before or during the period; they may or may not have been currently causing illness. Here diseases were included which would be excluded under "illness"—diseases under control through medicine or treatment, such as diabetes, and diseases which are currently quiescent, such as hay fever between seasons. Because of this wide range, looking at chronic conditions provides a broad picture of the amount of disease in a population.

More measures of effect of a chronic condition were used than for illnesses as defined in this Survey. Chronic conditions were classified according to whether they had ever been medically attended, and whether in the past 12 months they had been associated with hospitalization, disability, or activity limitation. In order to give a more inclusive measure of the effect of a chronic condition, the classification was carried further: whether the chronic condition had required regular or occasional medical attendance, whether it had caused disability in the past year and/or whether it had caused limitation of activity.

This series of measures of the effect of a chronic condition was used for two principal reasons: to meet as many of the potential uses of morbidity data as possible, and also to explore possible ways of describing disability. While different measures of disability are commonly used for different purposes, there are not many measures widely accepted.

[1] *For complete definitions, examples and interpretations of the rates used in this monograph, see Appendix C.*

AMOUNT AND EFFECT OF ILLNESS

In the following subsections three ways of looking at illness are presented.

(1) Illnesses which began during a four-week period are examined first. These illnesses are shown in both broad and detailed diagnostic groups. They are further classified as to whether or not they caused any disability.

(2) Next, estimates of the total number of *persons* affected by illness are presented. The only diagnostic detail shown here is whether the person experienced acute illness only, chronic illness only, or both types of illness during a four-week period.

(3) Finally, the total number of days of disability during the period is presented as it pertains to persons and to diagnostic groups.

Incidence of Illness

The word "incidence" has been variously defined. However, in this report it means the number of episodes of illness which *begin* during a specific period of time (four weeks preceding the week of interview). By this definition we include "new" conditions as well as "recurrences" and "relapses." For some conditions, such as mumps, the initial attack gives immunity to subsequent attacks; for other diseases, such as hay fever, the condition may have acute disabling episodes recurring from time to time although usually it is in a quiescent state. There are still other conditions, such as the common cold, which are acute but which can attack a person repeatedly with complete recovery between each attack. Any of these types will be included in the incidence rate of illness.

In examining rates of total illness, certain qualifications of household morbidity surveys must be borne in mind. The incidence rate probably represents a minimum rate for it depends upon factors such as the number of probing questions used, the time period of inquiry, the training of the interviewer and whether or not a person was interviewed for himself.[2] The rate is also low for conditions which might produce more than one episode of illness during a four-week period, since only the last episode was counted.

A General Picture

The Survey indicates that on the average each Californian experiences five or six episodes of illness per year, divided about equally between acute and chronic illness. Almost one-half of the episodes of acute illness are due to respiratory diseases and one-fourth are due to accidents.

[2] *This last methodological point was covered by a Post-Enumeration Survey done in conjunction with the California Health Survey. The results are discussed in Chapter 7 and some indications of what this adjustment means to sex-specific rates will be given in this chapter where pertinent to the interpretation.*

INCIDENCE OF ILLNESS

DIAGNOSIS[1]	Rate Per 1,000 Persons Per Year	
	Male	Female
Total	5,050	6,430
Acute Illnesses	3,050	3,200
Respiratory	1,370	1,370
Gastro-intestinal	330	330
Other Communicable	90	70
Accidents	740	620
All Others	530	810
Chronic Illnesses	2,000	3,230
Cardiovascular	80	160
Respiratory	420	450
Arthritis, Rheumatism and Bone Diseases	90	170
Other Neuromuscular	140	210
All Others	1,260	2,240

[1] See Appendix D, group coding of ISC classification.

It should be recognized that the incidence of episodes of illness is not necessarily the best measurement of long-lasting conditions or chronic conditions. Incidence data show the flare-ups from time to time which bother or disable those affected with a chronic condition. Some of the more serious chronic conditions causing constant difficulty —e.g., paralysis due to stroke—are not included in this rate, since by definition, incidence figures do not include chronic conditions which caused illness during the four-week period but started before that time.

Episodes of chronic illness account for one-half of the total incidence of illness. One of the more important types is chronic respiratory disease, which accounts for one-fifth of all episodes of chronic illness. Diseases which may interfere with normal motion—arthritis, rheumatism, other neuromuscular and bone diseases—also comprise a substantial proportion of chronic illness.

Common Causes of Illness

The frequency of more detailed causes of illness in various age-sex groups is shown in Appendix E, Table 5. These data refer to all illnesses without regard to their effect. As was pointed out in Chapter 1, survey estimates for detailed diagnostic groups are less precise than estimates for the broad groups.

ACUTE ILLNESS

As might be expected, the common cold is the most frequently reported acute illness. Children under five are reported to have about two colds per child per year, with the rate falling as the person grows older. The Survey provides public health agencies in California for the first time with information about the extent and distribution of this most common illness, as well as the other "minor" communicable diseases which are not included in the traditional physician-report system. Knowledge of how these diseases occur in the general population may open pathways to their control.

Accidents, the next most frequent cause of acute illness, show much the same pattern as the common cold. Children under five have more than one accident per year with most of these being "superficial injuries and contusions," and "lacerations and open wounds." Fractures and dislocations occur at a relatively low rate in childhood but rise and reach a plateau in young adults.

The "common childhood diseases" (chickenpox, measles, German measles, mumps, and whooping cough) have attracted attention as public health problems. Among school-age children more cases are reported for boys than for girls. The adjoining table shows, however, that girls are more inclined than boys to experience these diseases during preschool years. Even during childhood both the common cold and "intestinal flu" occur more frequently than do the "common childhood diseases."

INCIDENCE OF FREQUENTLY REPORTED ACUTE ILLNESSES

DIAGNOSIS[1]	Rate Per 1,000 Persons Per Year	
Common cold, sore throat, cough and nasopharyngitis	1,205	
Accidents, current[2]	679	
Superficial injury and contusions		226
Lacerations and open wounds		170
Sprains and strains		85
Burns		61
Fractures and dislocations		23
All other		113
Migraine and headache[2]	258	
Intestinal flu	177	
Bronchitis and chest cold	120	
Indigestion	109	
Common childhood diseases	60	

[1] See Appendix D, group coding of ISC classification.
[2] Specifically inquired about in Survey.

INCIDENCE OF COMMON CHILDHOOD DISEASES

	Rate Per 1,000 Persons Per Year	
	Male	Female
0-4 Years	150	200
5-14 Years	240	190

CHRONIC ILLNESS

Resistance to many types of acute illness appears to increase with age, as evidenced by its declining frequency with the years. However, chronic ill-

INCIDENCE OF FREQUENTLY REPORTED EPISODES OF CHRONIC ILLNESS

DIAGNOSIS[1]	Rate Per 1,000 Persons Per Year
Migraine and headache[2]	249
Asthma and hayfever[2]	209
Common cold, sore throat, cough and nasopharyngitis	166
Chronic sinusitis[2]	157
Arthritis and rheumatism[2]	132
Allergies (excluding asthma and hayfever)[2]	127
Back conditions[2]	125
Constipation[2]	92
Hemorrhoids[2]	69

[1]See Appendix D, group coding of ISC classification.

[2]Specifically inquired about in Survey.

nesses increase steadily with age—reflecting the cumulative effect of accidents, infections, personal habits and other illness-provoking factors throughout life.

Chronic or repeated trouble with migraine and other types of headaches is the most frequently reported chronic illness with a rate of 249 episodes per 1,000 persons per year. This reaches a peak of 370 per 1,000 persons in the 15-44 years age group, declining slightly after 65 years.

Asthma and hay fever (combined) constitute the next most commonly reported cause of chronic illness. Their incidence also rises from childhood and declines after age 65. This same age pattern is followed by chronic sinusitis and other chronic respiratory diseases.

Chronic arthritis and rheumatism are responsible for 132 episodes of illness per 1,000 persons per year. However, this overall rate conceals a sharp rise with age beginning with young adults and continuing even after age 65. Other diseases of muscle, bone and joint, and most cardiovascular and genito-urinary diseases have the same pattern —a sharp rise beginning early in adulthood and continuing beyond age 65.

Disabling Illness

The data presented above refer to all types of illness without regard to the effect of the illness. This total includes a large amount of illness which is not serious enough to cause any interruption in activities. Since the total number of conditions reported is subject to fluctuations depending upon the particular survey methods used, a more stable and possibly a more significant measure of incidence of illness is desirable. For this purpose one may use the incidence of disabling illness, i.e., illness which causes at least one or more days of interruption of activity.[1]

Table 6 in Appendix E shows the frequency of episodes of the major categories of acute and chronic illness which caused at least one day of disability. The incidence of disabling illness is only about one-third as great as that of total illness, that is, two episodes compared to five or six per person per year.

Disabling acute respiratory illness, which accounts for about one-third of all episodes of disabling illness, declines sharply with age. Children under 15 years of age have 1,290 such illnesses per 1,000 children each year, while persons 65 years and over report only 320 disabling acute respiratory illnesses each year. Gastrointestinal illnesses which cause disability also show a substantial decrease with age.

Current accidents account for one-tenth of all acute disabling illnesses. Males 15-44 years of age have disabling accidents more frequently than do females of the same age.

Contrary to the situation in acute illness, the rate for disabling episodes of chronic illness generally rises with age. This increase is particularly evident for cardiovascular diseases. A striking exception is chronic respiratory illness, where children have the highest rate. (The common cold; recurrent, is responsible for most of this chronic respiratory difficulty.) The high rate may be partly explained by the fact that it reflects answers to the question "Do you have chronic or repeated trouble with ..... (condition)?" The question was asked about all conditions, regardless of diagnosis. This constitutes a broader definition of chronicity than is usual.

[1] *The Post Enumeration Survey (see Chapter VII for details) shows that reinterviewing persons elicited some additional conditions, but did not increase the number causing disability. However, when someone absent at the time of the original interview was later interviewed for himself, there was an increase reported even in disabling illnesses. The effect this has on the incidence rates for disabling illnesses is seen by comparing the unadjusted rates of 1.7 episodes for males and 2.1 for females with the corresponding adjusted rates of 2.1 and 2.3 per person per year.*

Persons Affected by Illness

In addition to examining incidence, another way of viewing the illness picture in the population is to consider the *persons* affected by illness. To an increasing extent, the health professions are attempting to treat the ill person, rather than the specific illness currently causing him difficulty. Therefore, estimates are presented here of the total number of ill persons during a four-week period,

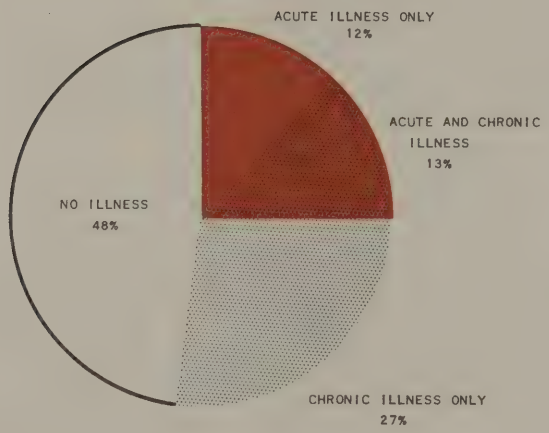
regardless of whether the illness began before or during the period, i.e., a four-week prevalence rate of ill persons.

One major advantage in using a person rather than an illness as the unit of analysis is that combinations of illnesses can be examined. Although diagnostic detail is lacking, persons were classified according to whether during a four-week period they experienced one or both of the two main *types* of illness—acute and chronic:

1. Had no illness.
2. Had acute illness only.
3. Had chronic illness only.
4. Had acute and chronic illness.

The chart below shows the proportion of the total population in each of the four groups.

PERSONS AFFECTED BY ILLNESS
DURING A FOUR WEEK PERIOD

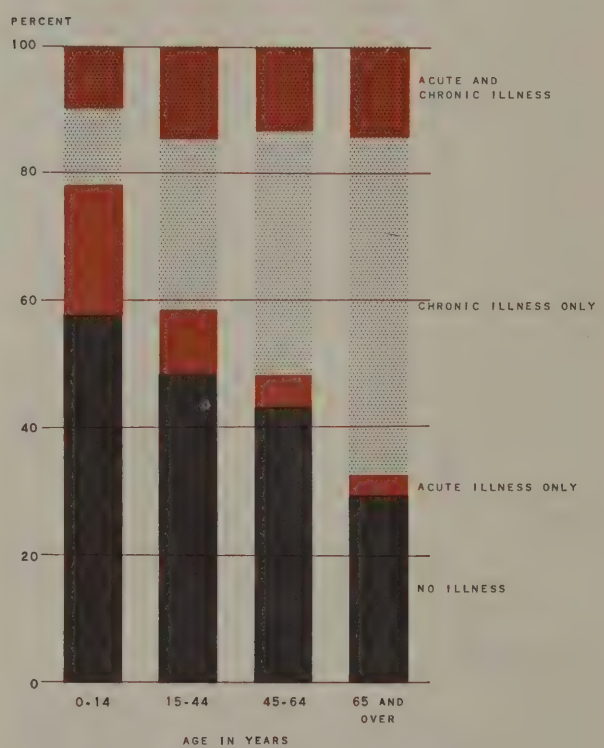


The proportion of persons in the different categories varies considerably with age. While about half the total population experiences some type of illness, this is true for only about two-fifths of the youngest group (0-14 years old) and for over two-thirds of the oldest age group (65 years old or older). Except for the youngest age group, the largest category of ill persons consists of persons with chronic illness alone.

The proportion of persons with "acute illness only" decreases with age, ranging from one-fifth of the youngest age group to less than one-twentieth of the oldest. The trend is sharply reversed for persons with "chronic illness only," the proportion increasing from one-eighth of the children to over half the persons aged 65 years or older.

These two patterns conform with what is generally known about the age variation associated with acute and chronic illness. However, as is shown in the chart below, the proportion of persons with both acute and chronic illness does not vary with age. About 10 to 15 percent of the persons in any age group experience both acute and chronic illness during a four-week period.

PERCENT DISTRIBUTION
OF PERSONS IN EACH AGE GROUP
BY TYPE OF ILLNESS



Days of Disability

Another measure of the effect of illness on the population is the number of days of disability resulting from illness.

Persons

On the average, each Californian reported 24 days of disability per year, with about 18 days for each child and 65 days for each person aged 65 years or older.

The number of days of disability reported varies with age and with the type of illness. The days of disability experienced by each person with acute illness alone falls rapidly after age 15 and

remains at a low level in the older age groups. For persons with chronic illness alone, however, the days of disability show a sharp increase with age—from four days per year for each child under 15 years old, to around 50 days per year for each person aged 65 years old or older. Still a different pattern is present for persons with both acute and chronic illness. Such persons experience around six days of disability per person per year, regardless of age, until the group aged 65 years or older is reached. For the persons 65 or older with both acute and chronic illness, the number of days of disability is about double that for the other age groups.

Approximately three-fourths of the days of disability from illness among older people represents the effect of chronic illness alone, and practically all the remainder is attributed to a combination of chronic and acute illness. These facts make plain the importance of continuity of medical care for older persons. For them, disabling illness does not consist of isolated periods of acute illness to be handled by episodic care; rather it is largely chronic illness which required continuing care. This continuing care appears to be at least as important in geriatrics as it is in pediatrics.

Diagnoses

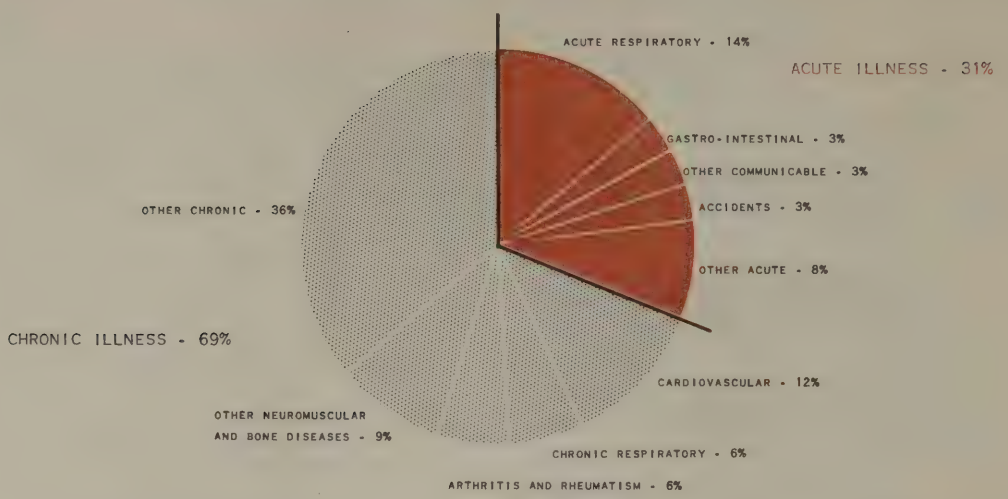
Of the 24 days of disability experienced on the average by each Californian during the year covered by the Survey, over 16 days were attributed to chronic illness and less than 8 days to acute illness. The figure on page 24 shows the relative importance, as measured by days of disability, of certain diagnostic groups used in the Survey.

In the Survey, if a person was disabled by more than one illness on the same days, the number of days of disability was divided by the number of illnesses. This results in an accurate count of the total number of days of disability for a person but in a slight underestimate of the days of disability for any particular illness.

Appendix E, Table 9, shows the major role chronic illnesses play in the days of disability reported by the survey population, particularly as age increases. For those persons 65 years and over, chronic illnesses cause about 90 percent of days of disability. Cardiovascular conditions account for almost 30 percent of these days of chronic illness.

In contrast, about 65 percent of days of disability for children (0-14 years) result from acute illness. Half the days of disability for children are for respiratory illnesses (both acute and chronic) while only 8 percent of days of disability are due to this cause among the group aged 65 years and over.

DAYS OF DISABILITY FOR ILLNESS



DAYS OF DISABILITY FROM FREQUENTLY REPORTED ILLNESSES

DIAGNOSIS[1]	Rate Per 1,000 Persons Per Year		
	Total	Acute Illness	Chronic Illness
Common cold, sore throat, cough and nasopharyngitis	3,130	2,650	480
Diseases of the heart	1,710	-	1,710
Arthritis and rheumatism	1,400	10	1,390
Results of old accidents[2]	1,120	260	860
Symptoms not classifiable to disease entity	1,060	230	830
Back conditions	950	70	880
Hypertension without mention of heart and general arteriosclerosis	810	-	810
Other muscle and bone or joint involvement	760	60	700
Accidents, current	720	680	40
Bronchitis and chest cold	710	390	320
Common childhood diseases	670	670	-

[1] See Appendix D, group coding of ISC classification.

[2] Accidents occurring at some time prior to the four weeks preceding the date of interview.

The above table shows the illnesses which result in the greatest amount of disability for all ages. The common cold leads the group followed by diseases of the heart, arthritis and rheumatism. However, to gain a more complete picture of the number of days of disability caused by any particular illness one must examine the specific rates in the various age and sex groups of the population.

AMONG THE CHILDREN

For the very young child (0-4 years) the common cold far outstrips any other illness, causing about eight days of disability per child per year. As the child grows he seems to acquire some immunity to this type of respiratory condition, and colds cause on the average only about 4½ days of disability per year among the 5-14 years age group.

The "common childhood diseases"[1] cause slightly over four days of disability per child per year up to the age of 14 years, with the girls having these conditions at a slightly younger age than the boys. Diseases of the ear and mastoid still cause quite a large amount of disability in the 0-4 years age group (one and a half days per child per year), in spite of the current extensive use of antibiotic drugs for prevention of such complications of upper respiratory diseases. Bronchitis and chest colds also cause about two and one-half days of disability for this same age group.

AMONG THE OLDER PERSONS

In adult life and the later years disabling illnesses take their greatest toll. The largest number of days of disability results from diseases of the heart and blood vessels, as shown in the table below. One category of heart disease, coronary artery disease, accounts for an average of about three days of disability per man per year among California men over 45 years of age. Thus, this disease is not only a leading cause of death, but of substantial disability during life.

DAYS OF DISABILITY FOR DISEASES OF THE HEART

	Rate Per Person Per Year	
	Male	Female
45-64 years	4.2	2.3
65 years and over	9.6	11.0

[1] *Chickenpox, mumps, measles, German measles, pertussis (whooping cough).*

DAYS OF DISABILITY FOR SELECTED CAUSES FOR 65 YEARS AND OVER

DIAGNOSIS[1]	Rate Per Person Per Year	
	Male	Female
Arthritis and rheumatism	5.9	8.0
Hypertension without mention of heart and general arteriosclerosis	3.8	6.0
Diseases of central nervous system affecting motion	3.9	3.6
Results of old accidents	3.0	4.3
Symptoms not classifiable to disease entity	3.7	3.2

[1] See Appendix D, group coding of ISC classification.

Arthritis and rheumatism also cause a great deal of disability in the group 65 years and over: 6.9 days for the males and 8.0 days for the females. Other chronic illnesses which cause considerable disability are shown in the table at the left.

AMOUNT AND EFFECT OF CHRONIC CONDITIONS

The growing significance of chronic conditions as a factor in the total health picture justifies special attention to them. The need for medical care and the amount of disability caused—too often long-term disability—makes knowledge of the extent and effect of chronic conditions particularly necessary. Such knowledge will also greatly enhance the development of measures to prevent disease and premature death.

The spectrum concept may be visualized readily in respect to chronic conditions. Their onset is often imperceptible. Many chronic diseases pass slowly through an asymptomatic stage, only gradually make their presence known by the development of symptoms, and may then progress to the point of requiring medical attention and causing disability. The conditions may advance until they finally result in death.

In view of the vagueness of their onset and their long duration, the prevalence of chronic conditions is a more meaningful measure, for many purposes, than is incidence. The term prevalence, as used in this report, refers to the number of conditions existing during a given period of time, irrespective of when they began, (Appendix C—Measures Used). To obtain this index, the California Health Survey recorded all chronic conditions known to be present during the one year preceding the interview.

In the Survey, the interviewer read both a list of chronic conditions and a list of symptoms (see Appendix A for these lists) to help the respondent recall any conditions he had had in the previous 12 months which had not already been reported as causing an episode of illness. The following sections of this chapter present data on the prevalence of all chronic conditions existing during a 12-month period, regardless of whether they had recently caused any illness. The population of persons with chronic conditions, grouped by differing effects of the condition upon the persons, will be described first. This will be followed by a discussion of the number and effect of chronic conditions in various diagnostic groups.

Persons With Chronic Conditions

In the Survey, about half of all Californians reported having had at least one chronic condition during the year. The proportion sharply increases with age. Less than one-third of children aged 0-14 years reported some chronic condition during the year, while more than three-quarters of the persons 65 years old and over reported such conditions. Table 11 in Appendix E shows chronic condition rates by age and sex distribution of persons according to three measures of the effect of the conditions. The older a person is the more likely he is to have a chronic condition and to have a severe one. This age pattern holds for each of the measures of effect used in this Survey.

Disability

Disability refers to any interference with usual activity. It can exist for a single day or for a longer period of time. One hundred and seventy-four persons per 1,000 reported a chronic condition severe enough to cause one or more days of disability in the year preceding the interview. This was about a third of the total of 503 per 1,000 who reported one or more chronic conditions irrespective of their effect.

Present Activity Limitation

Most measures of the degree of illness are based on physical considerations alone. The Survey attempted to determine how the person evaluated the impact of a chronic condition on himself—how much he considered it to limit his activities. One person with a chronic condition might classify himself as having considerable activity limitation while another person with the same condition might classify himself as having no activity limitation.

PROPORTION OF PERSONS WITH VARYING TYPES OF ACTIVITY LIMITATION BECAUSE OF CHRONIC CONDITIONS

To determine the extent to which persons experience activity limitation because of chronic conditions, all persons reporting a chronic condition were then asked to read a card and pick out the statement which best fitted them:

1. Cannot get around without help.
2. Cannot carry on usual activity.
3. Can carry on usual activity, but must cut down on amount and kind.
4. Can carry on usual activity, but must cut down on other activities.
5. No limitation imposed on activities.

On the average, about 100 out of 1,000 persons experience some degree of present activity limitation because of chronic conditions. Of these 100 persons, approximately five are complete invalids, in the sense that their activities are so limited that they cannot get around without help. (It should be borne in mind that this rate pertains to persons living outside of institutions.)

In the category of least extensive limitation ("must cut down on other activities"), the proportion of such person in the 65 year old and over group is about double that in the 15-44 years old group. In the next category ("must cut down on usual activity"), the oldest age group contains three times as large a proportion of such people as does the 15-44 years old group. Finally, in the other two categories combined ("cannot carry on usual activity," and "cannot get around without help"), the proportion of these people in the oldest group is about 15 times as high as it is in the 15-44 years old group.

Combined Measures of Effect of Chronic Conditions

One-third of all Californians report that they have chronic conditions which meet one or more of the three measures: disability or medical attendance during a year, or present activity limitation. This proportion increases with age until in the 65 and over group three out of five persons report chronic conditions meeting one or more of these criteria.

Chronic Conditions Reported

Californians reported having 960 chronic conditions per 1,000 persons during the year preceding interview. The prevalence rate of any chronic condition derived from the Survey represents a minimum rate. As mentioned previously there are many factors inherent in surveys which make it impossible to know the total amount of any particular condition. However, except for some sex differentials (see Chapter VII—Post Enumeration Survey) the *pattern* of prevalence in the population would probably not change with the use of additional techniques to obtain fuller reporting of chronic conditions.

Some of the more frequently reported chronic conditions are shown on the table below.

A more detailed table showing whether the condition was ever medically attended and whether it caused any disability in the past year can be found in Appendix E, Table 12.

SELECTED CHRONIC CONDITIONS

DIAGNOSIS[1]	Rate Per 1,000 Persons Per Year	
	Male	Female
Total	808	1,105
Cardiovascular diseases	55	79
Asthma and hayfever	68	69
Other chronic respiratory	99	92
Arthritis and rheumatism	41	77
Other neuro-muscular and bone diseases	68	67
Varicose veins	14	49
Skin affection and disease	41	44
Hemorrhoids	29	40
Anemia	69	50
Hernias	24	6
All Other	306	531

[1]See Appendix D, group coding of ISC classification.

Medical Attendance

In many respects, greater importance may be attached to medically attended conditions than to those for which medical attention has never been obtained. One condition, almost all cases of which were reported as medically attended, is ulcer of the stomach or duodenum—a disease often alleged to be a product of the tension in modern society. Men were reported to have this condition more often than women. The peak in frequency appears in the age group 25-44 years when one out of 30 men reported an ulcer that had been diagnosed by a physician.

Another medically attended condition more common among males is hernia, with about one out of 50 men reporting this condition. The frequency of hernias increases rapidly with age up to the group 65 years and over in which 77 per 1,000 males reported a medically attended hernia during a year.

With respect to the cardiovascular diseases, men appear to be more severely affected by arteriosclerotic heart disease including coronary artery disease. The male rate is 4.5 medically attended and disabling cases per 1,000 per year, and another 4.5 medically attended but nondisabling. As in the case of stomach and duodenal ulcers, the idea is gaining ground that coronary artery disease results somehow from the mode of life in present-day society. The sex, age, and perhaps social characteristics of persons with these diseases suggest avenues for investigation.

The conditions which had never been medically attended include a large block of respiratory diseases, as well as many instances of varicose veins, hemorrhoids, arthritis and rheumatism, and asthma and hay fever. Except for the respiratory diseases, these conditions which were not medically attended cause relatively little disability.

Disability

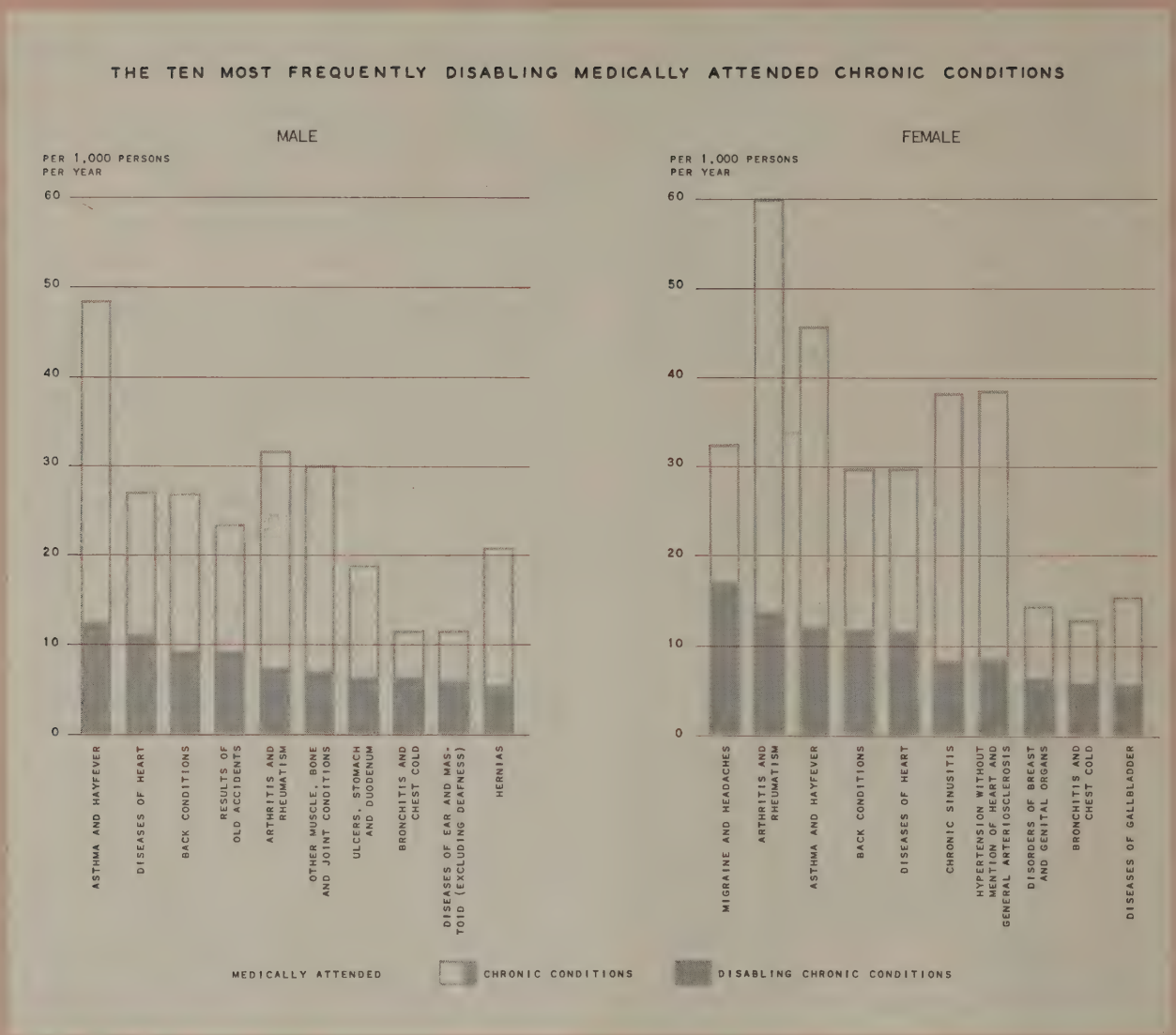
The frequency with which a condition is reported gives some indication of its impact on the population. A further consideration is whether the condition interferes with usual activities, that is, causes disability. In the chart on page 28, chronic conditions are ranked according to the frequency with which they cause disability.

In Appendix E, Table 13, several measures of the effect of chronic conditions are presented. Each permits examining in a somewhat different way the effect of the condition upon an individual.

Present Activity Limitation

Of the 960 chronic conditions reported per 1,000 persons per year, 150 conditions were reported as causing some present limitation of activity. The rate increases with age.

An interesting pattern of sex difference which appears among adults may reflect the difference in social role of the two sexes. While Group 3 has the greatest frequency, the males tend to be classified more often than females into Group 2, ("cannot carry on usual activity"), while the females fall more often into Group 3, ("can carry on usual activity, but must cut down on amount and kind



of activities"). A working man may not be able to carry on his "usual activity" and so be classified in Group 2, while a housewife with the same amount of physical limitation may be able to do *some* of her housework and so be classified in Group 3.

Combined Measures of Effect of Chronic Conditions

Slightly more than half the chronic conditions, 499 out of a total of 960 per 1,000 persons per year, met one or more of these criteria. This proportion holds for all age and sex groups.

This chapter has considered the spectrum of health—covering the extent of illnesses and chronic conditions, the number of people affected by them, and the various degrees to which they affect people. The following chapter presents another aspect of the health picture for Californians, the amount and kind of medical care which they obtain.

GLOSSARY

HOSPITAL ADMISSIONS. Hospital admissions are stays of overnight or longer reported as occurring in general and maternity hospitals within the 12 months preceding the week of interview. Hospitalizations terminating in death are excluded, since the information obtained concerns hospital experience of the living civilian population during the previous year. Also excluded is the hospitalization experience of newborns and of persons whose usual place of residence is in institutions.

DAYS OF HOSPITALIZATION. Hospital days are the number of days spent in a hospital, with the same qualifications as for hospital admissions. The day of admission but not the day of discharge was counted.

AVERAGE LENGTH OF STAY PER ADMISSION. The average length of stay in the hospital is obtained by dividing the total number of days hospitalized by the number of hospital admissions.

PHYSICIAN VISITS. Physician visits were reported for the four-week period preceding the week of interview. Physician visits mean that the doctor was personally consulted for (a) diagnosis or (b) preventive service or (c) other treatment; they include:

(1) Visits by the physician to the home.
(2) Visits to the physician's office.
(3) Visits to a hospital outpatient clinic.
(4) Visits to a clinic outside of a hospital.
(5) Visits to any place that X-ray treatment was given by a physician.

HOME NURSING CARE

FULL-TIME HOME NURSING CARE means that the patient cannot be left alone; someone must be in attendance or within call.

PART-TIME HOME NURSING CARE means that the patient requires help or nursing care only part of the time, such as help in dressing, eating or toilet activities.

POSSESSION OF HEALTH INSURANCE. Persons were considered to possess "some health insurance" if they reported insurance that pays for hospitalization, surgery, other physician's care or any combination of these. The remaining persons were considered to have no health insurance. This latter category includes persons who receive some cash benefits unrelated to medical care for time away from work because of illness.

CHAPTER 4

MEDICAL CARE

CHAPTER 4

MEDICAL CARE

Hospitalization

Modern health service depends to an increasing extent on hospitals. Childbirth, surgery, certain complicated diagnostic procedures—these and many other aspects of present-day medical care require hospitalization. As hospital care and its cost becomes a more prominent item in the total medical care picture, knowledge of the amount of hospitalization used by various segments of the population becomes increasingly important.

Amount of Hospitalization

California Health Survey data show that approximately one out of ten Californians is admitted to a general hospital in the course of a year. Women are admitted to hospitals more often than men. However, when hospitalization for childbirth is excluded, male and female rates are about the same—70 and 72 per 1,000 persons per year.

The greater amount of illness, especially severe illness, in the later decades of life is reflected in the increased rate of hospitalization with age. This rate rises more sharply for men than for women; beyond 65 years of age, the male rate is almost twice as high as that for young adult men.

These rates do not include hospitalizations for persons in the household dying during the year preceding interview. Analysis [1] of data from the San Jose pilot study indicates that the rise in mortality rates as age increases in paralleled by an increase with age for hospital admissions and days for terminal illnesses. Admissions and days for persons 65 years and over would be about one-third higher if hospitalizations terminating in death were included; for the total population adding

[1] *Estimates to be published by Medical Facilities Planning Section, Bureau of Hospitals.*

these hospitalizations increases the admissions by about 6 percent and the days by about 10 percent.

The rate of admission is one measure of the amount of hospitalization; another is to consider the total number of days spent in the hospital. On the average, a thousand Californians spend 881 days in a hospital during a 12-month period. Just as for hospital admissions, the rate of days spent in a hospital increases sharply with age.

Except for the childbearing years, males enter hospitals with greater frequency than do women and spend a greater number of days there. Even including hospitalization for childbirth, females spend only 798 days per 1,000 per year in a hospital compared with 968 for males.

For all ages, the average length of stay in a general hospital is 9½ days, varying from 5½ days for children under 15 years of age to 17½ days for persons over 65 years of age. The average length of stay for childbirth is four days.

Another way of viewing hospitalization is to convert the data into the number of beds that would be used by a population group on the basis of the following formula:

$$\text{Beds per 1,000 Persons} = \frac{\text{Hospitalization—days rate}}{\text{Percent Occupancy} \times 365}$$

Assuming an average 70 percent occupancy, 3.4 general hospital beds would be used per 1,000 persons covered by the survey. It should be remembered that persons who died during the preceding year and persons residing in institutions were excluded. The usage varies from about one bed per 1,000 children under 15 years of age to 7½ beds per 1,000 persons over 65 years. The significant relationship of hospitalization to a changing age composition is shown by this wide variation depending on age.

Diagnoses for Which Hospital Care Is Obtained

Hospital admissions for childbirth account for almost two-fifths of all the admissions among females. This is about one-fourth of all hospital admissions among the total population. Since most admissions for childbirth involve relatively short periods of stay, these proportions are reduced when hospital days are used as the measure of hospitalization.

By either measure, the male rate for hospitalization for digestive system disease, accidents and cardiovascular disease exceeds that for females. Hospitalization for cardiovascular disease among men 45 and over is somewhat greater than among women at comparable ages; mortality from cardiovascular disease is higher for men than it is for women.

Hospitalization for diseases of the digestive system rises steadily with age. Up to the age of 45 years, men are admitted to hospitals for such conditions more often than women. Thereafter the rates are about the same for the two sexes.

Up to age 65, males enter hospitals more frequently and stay longer as a result of accidents than do females.

Among the causes of hospitalization examined, only in the case of neoplasms does the rate for

women exceed the rate for men at comparable adult ages. Among persons aged 15 and over, women are admitted to hospitals because of neoplasms two to three times as frequently as men. The term neoplasm used in this connection includes both benign (nonmalignant) tumors and cancer.

The chart on page 31 reveals the amount of hospital utilization for several groups of diseases. Cardiovascular diseases account for only about 5 percent of all hospital admissions, but 9 percent of all hospital days because of the relatively long average length of stay for cardiovascular disease. One-tenth of all hospital admissions and more than one-sixth of all hospital days result from accidents. For all diagnostic groups, the average length of stay per admission generally rises with age.

Type of General Hospital Giving Care

California's general hospitals are of three major types according to their ownership and control: community,[1] county, and federal.[2] Community hospitals provide over 30,000 beds in the State. California has an extensive county hospital system. Of the 58 counties in the State, 47 operated their own general hospitals in 1954; the remainder of the counties obtain service by contract with other hospitals. The county hospitals include about 10,000 general hospital beds in addition to beds for custodial care. The general hospitals operated in the State by the Federal Government provide about 7,600 beds [3] which serve not only California but also some of the other western states.

While 81 percent of hospital admissions were to community hospitals, they account for only 65 percent of the hospital days of care. In part, this difference is the result of differences in average length of stay. The average length of stay in community hospitals is 7½ days as compared with 14½ days in county hospitals and over 23 days in federal hospitals. In community hospitals 18 percent of the admissions (excluding admissions for deliveries) were for one day and 32 percent were for two to four days while in county hospitals 12 percent of admissions were for one day and 25 percent for two to four days.

In the Survey data, as far as possible, custodial type care (as distinguished from general hospital care) in the county hospitals and the federal hospitals was eliminated. Yet approximately one-third of the hospital days for both the young (0-14 years) and the old (65 years and over) are provided in county hospitals. In the other age groups the county hospitals make available a little over one-tenth of the hospital days. The federal hospitals provide almost half of the general hospital days used by men aged 15-44, and more than one-fifth of the days for men 45-64 years of age.

HOSPITAL ADMISSIONS BY TYPE OF HOSPITAL

AGE AND SEX	PERCENT OF ADMISSIONS IN EACH TYPE OF HOSPITAL			
	All Hospitals	Community[1]	County	Federal
Total, All Ages	100	81	11	8
Less Deliveries	100	80	11	8
Male	100	76	11	13
Female	100	84	12	5
Less Deliveries	100	84	12	4
Deliveries	100	82	12	6
0-14 Years, Total	100	82	16	2
Male	100	82	17	1
Female	100	82	14	4
15-44 Years, Total	100	81	10	9
Less Deliveries	100	80	9	12
Male	100	73	6	21
Female	100	83	11	6
Less Deliveries	100	84	11	5
Deliveries	100	82	12	6
45-64 Years, Total	100	84	7	9
Male	100	81	6	13
Female	100	87	9	4
65 Years and Over, Total	100	74	22	4
Male	100	66	26	7
Female	100	83	16	1

[1]Includes University of California Hospital (State).

Note: For the interview period May, 1954 - April, 1955, covering hospitalizations for May, 1953 - April, 1955.
Hospitalization excludes newborn.
Data refer to hospitalization outside tuberculosis, mental and other institutional facilities of the resident non-institutional population exclusive of persons living on military posts.

[1] *Includes proprietary, voluntary nonprofit, district and city hospitals and, for this study, U. C. Hospital (state ownership) was included with community hospitals.*

[2] *Includes veteran administrative and military hospitals. (The military hospitals give some care to armed forces personnel living off the post, to ex-military personnel with service-connected disability, to civilian dependents of military personnel and to some civilian employees of the military hospital.)*

[3] *From Administrators Guide Issue, Hospitals, 1955.*

Physician Visits

The question eliciting information on physician visits was added to the questionnaire only during the last 13 weeks of the Survey. The data discussed here, therefore, represents physician visits for the period January, 1955-April, 1955.

The data on physician visits were collected for a period of the year in which morbidity is relatively high. At such a time it is presumed that demand on physicians would also be high. Yearly rates based on such a period should be interpreted with some caution. Figures presented also are subject to relatively greater sampling variations, since information on physician visits was obtained from only about one-fourth of the total sample.

Type of Service Given

Californians average five physician visits per person per year in addition to physician care received while in a hospital. The physician visit rate (including house calls and visits to outpatient clinics) varies from four visits for children less than 15 years of age to eight for persons 65 years of age and over.

In view of the increasing emphasis on health supervision, it is of some interest that approximately one-tenth of all physician visits are for such services. These include general checkup, pre- and post-natal services, immunization and vaccinations, and eye examinations. Women seek these services somewhat more frequently than do men. Some of this higher rate among women is due to the widespread practice of care throughout the maternity period. The practice of obtaining physician's care for health supervision appears to fall off after age 45—the time when it may be most needed.

Place of Visit

About four-fifths of the physician visits take place at the physician's office, one-tenth at the patient's home and the remaining tenth at a clinic. However, among persons 65 years of age and older more than one-fourth of physician visits are in the patient's home. Since an increasing

PHYSICIAN VISITS BY REASON FOR VISIT

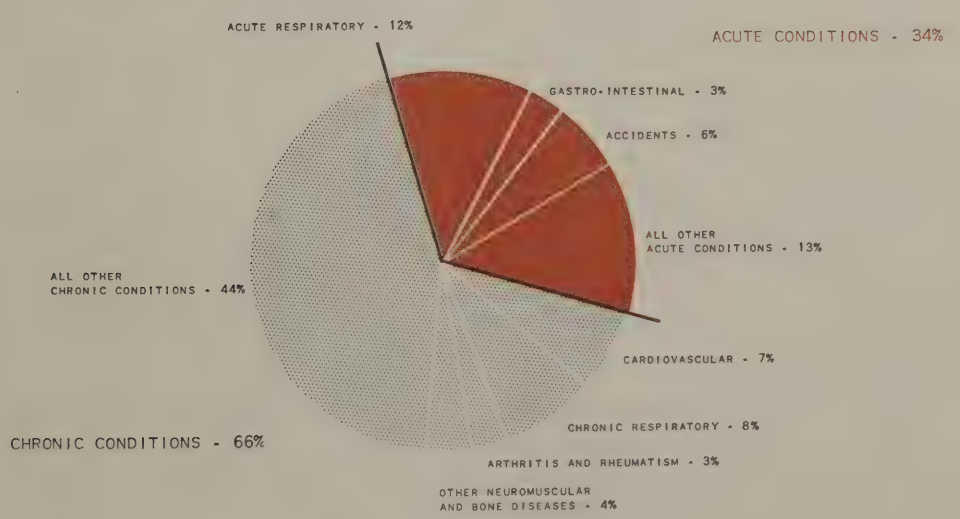
AGE AND SEX	REASON FOR VISIT[1]		
	TOTAL	Health Supervision	Illness
	Rate per person per year		
Total, All Ages	5.2	0.5	4.7
Male	4.5	0.4	4.2
Female	5.8	0.6	5.2
0-14 Years, Total	3.9	0.5	3.4
Male	3.8	0.5	3.3
Female	4.0	0.5	3.5
15-44 Years, Total	4.9	0.7	4.2
Male	4.5	0.5	4.0
Female	5.3	0.8	4.5
45-64 Years, Total	6.2	0.2	6.0
Male	5.3	0.2	5.2
Female	7.0	0.3	6.7
65 Years and Over, Total	8.0	0.3	7.7
Male	5.5	0.1	5.4
Female	10.3	0.5	9.8

[1] Only one reason for a visit was tabulated with preference given to "illness" as a reason.

Note: For the interview period February, 1955 - April, 1955.

Underlined figures represent 100-499 persons in sample.
Reports of physician visits are based on 27 percent of the total sample.

PHYSICIAN VISITS FOR ILLNESS



amount of medical care is being given older persons, those concerned with medical education will want to consider placing greater emphasis than at present on home-care teaching. (See Appendix F, Table 17.)

Diagnoses for Which Physician Visits Were Made

Two-thirds of all physician visits for illness are due to chronic conditions, one-third to acute conditions. The proportion of visits for acute conditions drops rapidly with age—from two-thirds among children 0-4 years of age, down to one-sixth among persons 65 years of age, and over. Correspondingly, the proportion of physician visits for chronic conditions rises with age. Among persons 65 years of age and older, about one-fifth of all physician visits for illness are for chronic cardiovascular disease.

Respiratory disease, both acute and chronic, is responsible for about one-fifth of all physician visits for illness.

Home Nursing Care

The inquiry about home nursing care was inserted in the questionnaire for the last 13 weeks of the Survey and covered home nursing care received in January-April, 1955.

The effect of season is probably not substantial here, since most home nursing care is for chronic conditions. Inasmuch as rates of home nursing care are based on a small sample, they are subject to relatively high sampling variations.

About 1 percent of the population receives some type of home nursing care. The rate increases sharply with age; those 65 years of age and over obtain such care at a rate of 65 per 1,000, while for persons under 65 the rate is only 5 per 1,000. About three-fifths of the home nursing care is part time.

Home nursing care is becoming of greater importance with the recognition that home care with adequate medical supervision is more desirable for many types of illness than is hospital care or other forms of institutional care. The increasing cost of hospital care is another factor that may stimulate greater development of home nursing service.

HOME NURSING CARE

TYPE NURSING CARE RECEIVED	RATE PER 1,000 PERSONS		
	Total	Under 65 Years	65 Years and Over
Total	11	5	65
Full-time care	4	2	26
Part-time care	6	3	39

Note: For the interview period February, 1955-April, 1955.
Reports for home nursing care are based on 27% of the total sample.

Health Insurance Coverage

Insurance to meet the costs of hospital and medical care has been increasing in California and throughout the United States during the past decade or two. The California Health Survey showed that for the 1954-1955 period 52 percent of the population carried some type of health insurance.

Growth of Health Insurance Coverage

According to the Commission on Financing Hospital Care, the rate of increase of insurance for hospital costs in California since World War II has not kept pace with that in the rest of the United States.

Indication that the Western Region is somewhat behind the rest of the Country in health insurance comes also from a recent survey by the Health Information Foundation. Its report (National Family Survey of Medical Costs and Voluntary Health Insurance) for July, 1953, discloses that in the United States as a whole 57 percent of persons had some type of hospital insurance. The Western Region was low with 47 percent, and the North Central States high with 65 percent.

The California Health Survey revealed that practically all persons with health insurance for hospitalization had some coverage for surgery costs as well.

Extent of Health Insurance Coverage

There is not much difference between the sexes in respect to coverage by health insurance. How-

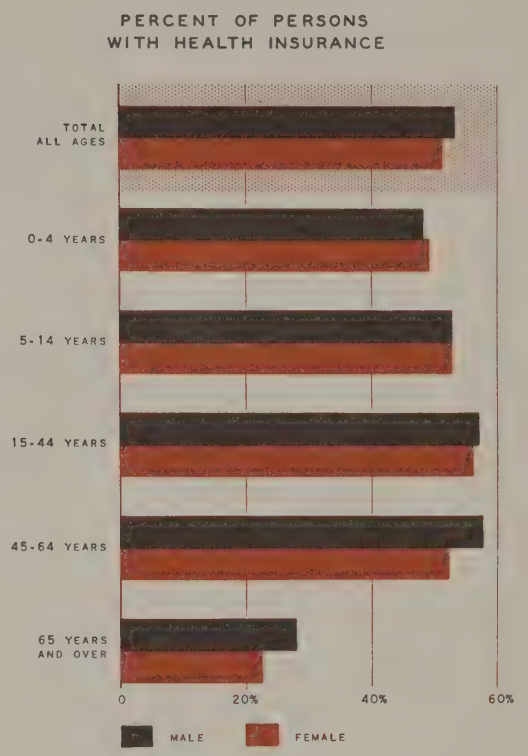
PERCENT OF POPULATION WITH PREPAID HOSPITALIZATION PROTECTION

YEAR	UNITED STATES	CALIFORNIA
1941	9.3	13.2
1946	22.8	23.0
1953	58.9	51.1

Source: Financing Hospital Care in the United States, Vol. 2, Prepayment and the Community, Appendix Table 1.

ever, the age differential is considerable, with a sharp drop beyond age 65. Over one-half of all persons up to the age of 65 years had some health insurance, but only about one-fourth of persons beyond that age were protected.

Some further facts about health insurance, particularly the coverage among various population segments, appear in Chapter 5.



CHAPTER 5

HEALTH AND MEDICAL CARE AMONG POPULATION GROUPS

CHAPTER 5

HEALTH AND MEDICAL CARE AMONG POPULATION GROUPS

Introduction

Chapters 3 and 4 presented data on health and medical care for age and sex groups. The purpose of this chapter is to summarize health and medical care for various population groupings other than by age and sex.

In the subsections of this chapter, the population has been divided into a number of segments, and the health and medical care patterns of each are described. These descriptions are intended to aid administrative planning so that efforts can be focused on those parts of the population in which illness is concentrated. These descriptive data can also provide clues for further investigation by epidemiologists.

Population Segments

As communicable disease comes closer to the irreducible minimum, public health workers are placing increasing emphasis on noninfectious disease. Much of the latter type of disease appears to be connected with the social and economic environment.

Besides the well-defined occupational and nutritional diseases known to be associated with the life situations of the affected persons, there are other conditions in which the association is not yet so clearly defined. These include: serious ailments, such as stomach and duodenal ulcers or coronary heart disease; less serious disorders such as chronic constipation or headache; and subclinical states which keep people at some point short of full health.

Obviously, patterns of living affect people's habits and attitudes. In relation to illness, these patterns may affect how people think about illness, and how they react to their illnesses—whether they cut down on social activities, stay home from work, seek medical attention, take "home remedies," or even ignore their illnesses until they become far advanced.

These different reactions are particularly relevant to the study of chronic conditions. For instance, an acute condition, such as appendicitis, will almost certainly be medically attended and cause some disability, but whether the recurrence of a chronic condition, such as sinusitis, will have similar results depends at least partly on the affected person's attitude toward his illness.

The Aged

With an increasingly longer-lived population, the aged portion of society (those 65 years and over) has been receiving increased attention in recent years. In California in 1954, persons 65 years old and over represented about 8 percent of the total population. About 40 percent of these people were aged 65 to 69 years; 30 percent were between the ages of 70 and 74 years; and 30 percent were 75 years old or older.

The life situation for this group, particularly for the women, differs from that for the rest of the population, partly because of a disadvantageous economic position, the loss of a spouse by death, and advanced age. Twelve percent of the total Survey population reported their yearly family income as less than $2,000, while 43 percent of the population 65 years and over reported this income. Only 7 percent of the total adult population are widowed—i.e., widows or widowers—while 51 percent of the women 65 years and over are widows. A life situation, so different from the rest of the population undoubtedly has implications for the health status of the aged and the medical care obtained by them.

As might be expected, the aged are less healthy and require more medical care than does the population as a whole. Chronic conditions are of particular significance. Compared to the population as a whole, the aged average twice as many chronic conditions, almost twice as many which cause one or more days of disability during the

HEALTH AND MEDICAL CARE AMONG THE AGED

	PERCENT OF POPULATION	MEDIAN AGE	HEALTH						MEDICAL CARE			
			Incidence of Illness[1]		Chronic Conditions[1]			Days of Disability[2]	Hospitalization[1]		Some Health Insurance[3]	Physician Visits[2]
			Total	Disabling	Total	Disabling	Cause Activity Limitations		Admissions	Days		
Total, All Ages	100.0	30.1	5,760	1,911	960	237	152	23.9	71[a]	797[a]	52	5.2
65 Years and Over, Total	8.2	70.1	5,443	1,532	1,986	395	570	65.4	109	1,900	25	8.0
Male	3.9	b	4,634	1,182	1,821	360	520	65.0	121	2,018	28	5.5
Female	4.3	b	6,177	1,850	2,137	428	613	65.7	98	1,792	23	10.3

1 Rate per 1,000 persons per year.
2 Rate per person per year.
3 Percent of population.

a Excludes deliveries.
b Not available.

Note: Underlined figures represent between 100-499 persons in the sample.

year and more than twice as many which restrict the activity of the person in some way. The aged report about two chronic conditions per person and they report about one-fourth of these conditions as restricting their activity in some way.

The aged also experience more days of disability per person during the year than does the total population. As mentioned in Chapter 3, a disabling illness or condition is one which kept a person in bed (either at home or in a hospital), prevented him from going outdoors, or otherwise interfered with his usual activities all or part of a day. Persons 65 years and over reported on the average 65 such days each year, while the total population had 24 days of disability per person per year. Hospital days are also high, with about 1.9 days per person being reported for the aged. Aged females utilize hospitals to a lesser extent than aged males, although the women have higher illness rates. Home nursing care is provided for an average of 65 of every 1,000 older persons, while the rate is only 5 per 1,000 for persons under 65 years old (see Chapter 4, page 34).

Only 25 percent of this aged segment of the population has health insurance coverage, while 52 percent of the total population have some type of health insurance. More aged males have such coverage than do aged females.

The Survey data confirmed the usual impression that in the later years of life persons are more likely to experience long-lasting conditions, to be disabled more often, and to require more medical services. The data also brought out that these persons are less likely to have health insurance coverage.

All Ages

Race

White persons (excluding those with Spanish surnames) constitute 86 percent of California's population, while people with Spanish surnames, Negroes and persons belonging to "other" races—chiefly Oriental—together comprise the other 14 percent. In considering the data relating to these various groups, it should be borne in mind that economic status accounts for only part of the differences in life situations. Social customs and beliefs of particular minority groups may be as significant as economic status.

Persons with Spanish surnames do not comprise a separate racial group, but in many respects a large part of this group (Mexicans) have social and economic status similar to that of nonwhite members of the population. In California and the other states bordering Mexico such persons are numerous enough to merit separate consideration.

In general, whites have the highest rates for illness and for medical care utilization, followed by Negroes, then by persons with Spanish surnames, and finally by persons classified as "other," who are principally Oriental. The median ages of the Spanish surname, Negro, and "other" groups are substantially lower than that of the white group, and it should be remembered that age plays an important role in illness rates. Moreover, the two groups with the lowest illness rates, Spanish surname and "other," are also the two groups most

HEALTH AND MEDICAL CARE AMONG RACIAL GROUPS

	PERCENT OF POPULATION	MEDIAN AGE	HEALTH						MEDICAL CARE				
			Incidence of Illness[1]		Chronic Conditions[1]			Days of Disability[2]	Hospitalization[1]			Some Health Insurance[3]	Physician Visits[2]
									Excluding Deliveries				
			Total	Disabling	Total	Disabling	Cause Some Activity Limitation		Admissions	Days	Admissions		
Total, All Ages	100.0	30.1	5,760	1,911	960	237	152	23.9	71	797	93	52	5.2
White (excluding Spanish surname)	86.1	31.2	5,924	1,976	1,014	249	160	24.7	75	827	95	54	5.6
Spanish surname	6.8	22.4	3,939	1,630	550	159	93	19.9	47	608	76	37	2.3
Negro	5.4	23.9	5,801	1,642	722	211	135	19.5	50	724	82	40	3.7
Other	1.7	27.4	4,242	1,336	602	117	53	14.1	35	255	62	31	(2.5)

1 Rate per 1,000 persons per year.
2 Rate per person per year.
3 Percent of population.

Note: Underlined figures represent between 100-499 persons in sample.
Figures in parentheses represent less than 100 persons in sample.

likely to experience some language difficulty in replying to the questions of an interviewer. Language difficulty is likely to be a problem in the "other" group, since at least the list of chronic conditions was partly translated into Spanish for the Spanish-speaking group. (See Appendix A, Card A (Spanish).) This "other" group is a small part of the total population, less than 2 percent, so that the rates for this group are subject to relatively high sampling variations. When these variations are taken into account, the rates for this group fall into the same range as those for the Spanish surname group. For these reasons, only the three major groups will be discussed further.

Besides examining the rates, a useful way to look at health is to compare in the various groups the proportion of total incidence of illness and of total chronic conditions which are disabling or cause some activity limitation. Looked at in this way, Spanish surname persons present a particular problem as far as incidence of illness is concerned, since 41 percent of their reported illnesses cause some disability, compared to 34 percent for whites and 28 percent for Negroes. Even though the Negroes and persons with Spanish surnames in the Survey population had a considerably younger median age than the white Californians, both groups showed a higher proportion of chronic conditions causing disability or some present activity limitation. These differences are not as large as the ones for incidence. To summarize the racial patterns of health and medical care: The total rates for illness and chronic conditions are highest for white persons, but the illnesses and chronic conditions reported by members of the minority groups are likely to be more severe. These minority groups also tend to have longer periods of hospitalization than do the white persons although their rate of admission to hospitals is not as high. Also, they are less likely to possess some health insurance coverage and to visit physicians.

Income

Subject to many qualifications, it can be said that family income levels are often associated with general health conditions. The classification according to income used here for the analysis of health and medical care is a common one, but admittedly crude. In essence it is a comparison of persons with low family incomes with persons in all other income groups. The following table shows the distribution of the total sample according to smaller income classes and may serve as useful background information, even though health and medical care data for these smaller groups are not now available.

The following discussion will be concerned with patterns of health and medical care among three income groups—less than $2,000, $2,000 to $4,999, and $5,000 and over.

In general, there is a marked contrast in health and medical care between the lowest income group and the other two income groups, which have fairly similar patterns. The lowest income group is less healthy than the other two groups, particularly with respect to chronic conditions and days of disability. This group also obtains more hospital care than the other two. Possession of some health insurance coverage is less than half as frequent among low income persons as it is among persons in the middle income group, and less than a third as frequent as is true for persons in the highest

PERCENT DISTRIBUTION OF ALL CALIFORNIANS
BY ANNUAL FAMILY INCOME, 1954

	ANNUAL FAMILY INCOME								
	TOTAL[1]	Less Than $1,000	$1,000-1,999	$2,000-2,999	$3,000-3,999	$4,000-4,999	$5,000-5,999	$6,000-6,999	$7,000 and Over
All Ages	100.0	5.6	6.6	8.5	16.4	16.1	14.7	9.5	18.5

[1] Total includes persons whose annual family income was not ascertained.

income group. A partial explanation may be that in the low income group many of the people are too old to qualify for present forms of health insurance coverage.

At least part of the differences in the health and medical care picture between the lowest income group and the other two can be explained by differences in median age. The median age for persons with family incomes of less than $2,000 is 46 years. This is 18 years older than the median age in the other two income groups. With such a large age difference, it is difficult to separate the effects on health status of age from the effects of low income. It is possible, too, that the poor health status of this group, particularly with respect to chronic conditions limiting activity, may have caused the low incomes of some of these people, rather than the converse.

HEALTH AND MEDICAL CARE AMONG FAMILY INCOME GROUPS

	PERCENT OF POPULATION	MEDIAN AGE	HEALTH						MEDICAL CARE				
			Incidence of Illness[1]		Chronic Conditions[1]			Days of Disability[2]	Hospitalization[1]			Some Health Insurance[3]	Physician Visits[2]
									Excluding Deliveries				
			Total	Disabling	Total	Disabling	Cause Some Activity Limitation		Admissions	Days	Admissions		
Total, All Ages	100.0[a]	30.1	5,760	1,911	960	237	152	23.9	71	797	93	52	5.2
Less than $2,000	12.2	45.7	6,757	2,057	1,479	341	363	45.5	95	1,546	113	20	5.2
$2,000-$4,999	41.0	28.1	5,414	1,812	892	228	136	21.6	68	795	93	49	5.0
$5,000 and over	42.7	28.3	5,933	2,052	885	222	108	20.3	68	612	87	66	5.3

[1] Rate per 1,000 persons per year.
[2] Rate per person per year.
[3] Percent of population

[a] Includes not ascertained.

Geographic Area

Whether people live in or near a great metropolis, in smaller urban places, or in open country affects the way they live. Differences in place of residence are known to be related to patterns of family size and social attitudes. They may also be associated with health conditions and health services.

While the table on page 42 indicates that approximately three-fourths of all Californians live in the three largest metropolitan areas (Los Angeles, San Diego or the San Francisco Bay area), it should not be assumed that the rest of the State's population lives in rural areas. The group listed as living in the "remainder of the State" includes many persons living in medium-sized and small cities as well as in rural areas.

Persons living in or near the three large metropolitan areas in California are as healthy as persons in the "remainder of the State," and are more likely to have some health insurance coverage. Some of this difference in the possession of health insurance may be because health insurance coverage is more readily available to workers in large metropolitan industries under various group plans.

Persons living in the "remainder of the State" experience more days of disability per person during a year, as well as a greater frequency in

HEALTH AND MEDICAL CARE BETWEEN GEOGRAPHIC AREAS

	PERCENT OF POPULATION	MEDIAN AGE	HEALTH						MEDICAL CARE				
			Incidence of Illness[1]		Chronic Conditions[1]			Days of Disability[2]	Hospitalization[1]			Some Health Insurance[3]	Physician Visits[2]
									Excluding Deliveries				
			Total	Disabling	Total	Disabling	Cause Some Activity Limitation		Admissions	Days	Admissions		
Total, All Ages	100.0	30.1	5,760	1,911	960	237	152	23.9	71	797	93	52	5.2
Metropolitan	73.8	30.4	5,849	1,939	939	227	138	22.4	69	791	90	56	5.2
Remainder of State	26.1	29.2	5,502	1,866	1,028	269	192	28.3	76	814	101	41	5.7

1 Rate per 1,000 persons per year.
2 Rate per person per year.
3 Percent of population.

all three measures of chronic conditions used in the Survey. These higher rates for chronic conditions exist even though the median age for these people is about the same as that for residents of the three largest metropolitan areas.

Health Insurance Coverage

Health insurance coverage has spread rapidly in recent years. The California Health Survey data shows that more than half the population possesses some type of coverage. However, certain population segments are more likely to have health insurance than others. White persons, persons with annual family incomes of $5,000 or more and persons living in the three major metropolitan areas have already been mentioned as possessing some protection against the costs of illness more often than the remainder of the population. As will be seen later, married persons, workers, and persons who have never lived outside of California are also more likely to have health insurance coverage.

Although the median age of the group with some health insurance coverage is about the same as that for the group without health insurance, the latter group contains slightly more persons in the two extreme age groups—under 15 and 65 years of age and over. It was pointed out earlier, in the section on the aged, that only 25 percent of all persons 65 years and older possess some health insurance.

The two groups, those with and those without health insurance, show no difference with respect to the overall rate for chronic conditions. However, persons without health insurance have twice as high a proportion of chronic conditions which cause some activity limitation (20 percent compared to 10 percent). They also experience a greater number of days of disability than do persons with health insurance.

Although persons with health insurance are admitted to the hspital more frequently, persons without health insurance have a longer average length of stay per hospital admission—about 14 days compared to 9 days.

HEALTH AND MEDICAL CARE ACCORDING TO HEALTH INSURANCE COVERAGE

	PERCENT OF POPULATION	MEDIAN AGE	HEALTH						MEDICAL CARE				
			Incidence of Illness[1]		Chronic Conditions[1]			Days of Disability[2]	Hospitalization[1]			Some Health Insurance[3]	Physician Visits[2]
									Excluding Deliveries				
			Total	Disabling	Total	Disabling	Cause Some Activity Limitation		Admissions	Days	Admissions		
Total, All Ages	100.0	30.1	5,760	1,911	960	237	152	23.9	71	797	93	52	5.2
No health insurance	47.8	31.2	5,486	1,903	972	245	197	28.2	64	915	86	-	4.8
Some health insurance	52.2	29.3	6,009	1,935	949	230	110	19.8	77	689	99	-	5.5

1 Rate per 1,000 persons per year.
2 Rate per person per year.
3 Percent of population.

Fifteen Years and Older

In discussing the remaining population segments, it is plain that discussion of marital status and activity status would concern adults, but because of California's unusually high in-migration, one of the groups in the migrant status classification (persons who have never lived outside California) is largely composed of children. For this reason it seems best to at least partially remove this age effect by comparing only persons at least 15 years old.

Marital Status

In recent years public health workers have noted a decided association between marital status and mortality rates. Married persons apparently experience lower death rates for each age group than do persons in the other groups. Studies have also indicated that the married group appears to be relatively protected against certain types of morbidity, as measured by admissions to hospitals in general, and to mental hospitals in particular.

Before considering in detail Survey data concerning marital status in relation to health and medical care, it might be well to bring out the differences in the median ages of the four marital status groups. The widowed persons have a median age of 67 years, the married and divorced groups slightly over 40 years of age, and the never-married group a median age of 33 years.

Since age is important with respect to chronic conditions, part of the pattern to be described may be explained by age alone.

Widowed (i.e., widow or widower) and divorced persons appear to be the least healthy, particularly as far as chronic conditions and days of disability are concerned. They also make the greatest demands for medical services. The married group is healthier, while the "never married" group seems to be the healthiest of all. The married persons most often possess some health insurance coverage while the widowed and divorced persons possess it least often.

The relatively favorable health picture for never married persons and the unfavorable picture for widowed persons may be accounted for by age, but age alone cannot account for the differences between married and divorced individuals, since these two groups have about the same median age. Although the reasons for these differences cannot be stated with certainty, it is possible that the social ties and responsibilities present in the married status provide a greater incentive toward prevention and adequate care of illness. Another possible factor is that the emotional disturbances which manifest themselves in divorce, may also lead to illness. In light of the findings of this survey, the medical implications of the high, and rising, divorce rate in California deserve intensive study.

Activity Status

The activities pursued by a person undoubtedly influence his habits and attitudes toward life in general, and perhaps his illness pattern and reaction to illness and medical care. The relationship is a two-way one for a person's health status may limit the type of usual activity he can undertake.

The table on page 44 indicates that of all persons 15 years of age and over, more than half are workers, and about one-third are housewives. The unable-to-work group consists of persons so classified because of long-term illness. The "something else" category is composed largely of retired persons and is predominantly male, since older nonworking women tend to classify themselves as housewives. The median age for these latter two groups is roughly 20 years older than the median age for housewives or workers.

HEALTH AND MEDICAL CARE AMONG MARITAL STATUS GROUPS

	PERCENT OF POPULATION	MEDIAN AGE	HEALTH						MEDICAL CARE				
			Incidence of Illness[1]		Chronic Conditions[1]			Days of Disability[2]	Hospitalization[1]			Some Health Insurance[3]	Physician Visits[2]
									Excluding Deliveries				
			Total	Disabling	Total	Disabling	Cause Some Activity Limitation		Admissions	Days	Admissions		
Total, 15 Years and Over	100.0	40.5	5,882	1,551	1,196	276	204	26.3	83	1,029	114	52	5.7
Married	70.9	40.3	5,979	1,523	1,177	271	190	25.1	85	952	125	57	5.5
Widowed	7.4	66.5	6,457	1,629	1,862	396	467	51.1	95	1,623	106	30	7.8
Divorced, annulled, separated	5.9	43.6	6,957	1,806	1,508	367	309	37.5				43	
Never married	15.6	32.8	4,786	1,532	790	208	102	15.8	68	800	68	47	4.4

1 Rate per 1,000 persons per year.
2 Rate per person per year.
3 Percent of population.

HEALTH AND MEDICAL CARE AMONG ACTIVITY STATUS GROUPS

	PERCENT OF POPULATION	MEDIAN AGE	HEALTH						MEDICAL CARE				
			Incidence of Illness[1]		Chronic Conditions[1]			Days of Disability[2]	Hospitalization[1]			Some Health Insurance[3]	Physician Visits[2]
									Excluding Deliveries				
			Total	Disabling	Total	Disabling	Cause Some Activity Limitation		Admissions	Days	Admissions		
Total, 15 Years and Over	100.0[a]	40.5	5,882	1,551	1,196	276	204	26.3	83	1,029	114	52	5.7
Worker	52.6	39.0	5,262	1,213	953	198	111	12.2	67	691	72	62	5.3
Housewife	30.9	41.8	7,263	1,950	1,491	344	256	30.6	85	644	173	46	6.0
Unable to work	2.5	62.4	6,825	2,644	2,701	1,170	1,351	250.2	176	4,275	479	20	6.0[a]
Something else	8.0	65.2	4,709	1,301	1,465	321	363	43.7				44	

1 Rate per 1,000 persons per year.
2 Rate per person per year.
3 Percent of population.

[a] Includes students and not ascertained.

Note: Underlined figures represent between 100-499 persons in sample.

In general, workers appear to be the healthiest group of all, followed by housewives, those who do "something else," and finally, persons who are unable to work. Those who are unable to work, perhaps almost completely by definition, present the least favorable health picture of any of the groups and are least likely to possess some health insurance coverage.

Despite a considerably higher median age than housewives or workers, persons in the category "something else" have about the same rate for total and for disabling chronic conditions as do housewives. With respect to incidence of all illnesses and of disabling illnesses, persons who do "something else" (largely retired) present an even more favorable picture than housewives, close in fact to that of the workers. However, this older group does experience a higher number of days of disability and has more chronic conditions which cause some activity limitation. In neither case, however, are the rates for this group as high as they are for persons who are "unable to work."

The differences between the "unable to work" and "something else" groups—both largely older persons—suggests that disabling illness associated with old age may actually be concentrated in a relatively small segment of older persons. Services to improve the health of older people perhaps ought to be directed toward this special segment rather than toward older persons generally. Just as health services to control tuberculosis and other diseases are now being aimed at limited sections of the population, it appears that a similar closer definition of health problems among older persons would permit better direction of health services for them.

In computing rates for hospital admissions, hospital days and physician visits, the "unable-to-work" and "something else" groups were combined. There is no difference between the three resulting groups as far as physician visit rates are concerned. However, the combined "unable-to-work" and "something else" group has a substantially higher rate for hospital admissions and hospital days than do either workers or housewives.

Migrant Status

As can be seen in Appendix E, Table 2, which shows the population in the various demographic groups by age and sex, the majority of persons who have never lived outside California are under 15 years of age. For this reason it seems best to compare only persons aged 15 years and over in the three migrant status groups. The definition of "migrant" used here is not the usual one; it is based on when the person *last* moved to California. By this definition some people who were born in California (the usual definition of a native Californian) but who lived outside the State for a time and then returned, would then be classified according to when they last returned to live in California.

Persons who last moved to California before 1946 had the highest median age of any of the three groups, over 10 years higher than the median age for the other two groups. In general, the two groups with about the same median age, "never lived outside California" and "1946 and after" have about the same morbidity rates and these are lower than the rates for persons who last moved to California before 1946.

HEALTH AND MEDICAL CARE AMONG MIGRANT STATUS GROUPS

	PERCENT OF POPULATION	MEDIAN AGE	HEALTH						MEDICAL CARE				
			Incidence of Illness[1]		Chronic Conditions[1]			Days of Disability[2]	Hospitalization[1]			Some Health Insurance[3]	Physician Visits[2]
									Excluding Deliveries				
			Total	Disabling	Total	Disabling	Cause Some Activity Limitation		Admissions	Days	Admissions		
Total, 15 Years and Over	100.0[a]	40.5	5,882	1,551	1,196	276	204	26.3	83	1,029	114	52	5.7
Never lived outside California	21.9	35.4	5,867	1,759	997	245	138	22.1	78	811	121	58	5.2
Last moved to California:													
Before 1946	48.7	48.7	5,896	1,494	1,352	298	257	31.1	86	1,122	104	51	5.9
1946 and after	29.0	35.2	5,922	1,499	1,091	264	162	21.7	83	1,007	126	51	5.7

1 Rate per 1,000 persons per year.
2 Rate per person per year.
3 Percent of population.

[a] Includes not ascertained.

The "never lived outside California" group has a higher incidence of disabling illness than either of the other groups, but with respect to chronic conditions, this group presents a somewhat more favorable picture than the other groups. The "never lived outside of California" group is more likely to possess some health insurance coverage than are the other two groups.

There is a popular notion that in recent years California has been attracting old people in poor health who are anxious to "settle down" in a pleasant climate. However, this Survey shows that persons who have migrated here in recent years have about the same median age, and do not differ greatly in their health and medical care pattern from persons who have lived their entire lives in this State.

Summary

The following segments of the population in particular appear to have a wide range of health problems:

Persons over 65 years old.

Persons with annual family incomes of less than $2,000.

Persons classified as "unable to work" or "something else" (primarily retired individuals).

Widowed and divorced persons.

Persons who last moved to California before 1946.

In respect to chronic conditions and days of disability, the following two groups have problems to a greater extent than their counterparts in the rest of the population:

People living outside the three major metropolitan areas.

People with no health insurance coverage.

Many of these population segments overlap with respect to some other characteristics. Often age alone appears to play a major role. Most of the groups with a wide range of health problems have a considerably higher median age than the remainder of the population. These segments are less likely to possess health insurance coverage; and their older median age may have prevented qualification for some of the present forms of health insurance coverage.

Other less evident factors than age may also be important. In general, these groups probably have a lower family income than the remainder of the population, and this lower income may in part be the result of poor health status. Certain of these population groups live in relative social isolation, since some of their social ties have been severed or at least greatly weakened. This is particularly true of persons who are aged, who are unable to work, are retired, or are widowed or divorced.

Situations of social isolation may be conducive to lack of interest in and attention to health. Age may decrease resistance to chronic disease and result in greater lengths of disability when ill. Lack of financial resources may predispose persons to illness through inadequate diet, poor housing, and similar factors. The same lack can also account for failure to obtain early medical care when ill. All these factors merit further study by members of the health professions.

CHAPTER 6

USES OF FINDINGS IN A STATE HEALTH DEPARTMENT

CHAPTER 6

USES OF FINDINGS IN A STATE HEALTH DEPARTMENT

Introduction

The orientation of public health effort changes from time to time in response to alterations in the pattern of disease affecting the population.

A general reorientation of public health appears to be taking place at the present time. Health departments came into being because of the necessity for organized community action against the epidemic diseases. Over the years public health agencies have demonstrated their effectiveness in dealing with other types of illness, as well, for example occupational and nutritional diseases. Now chronic disease, accidents, and emotional disturbances are forcing attention.

As new health problems gain prominence, current morbidity data about them is needed. During the year of the Survey and afterward, the staff of the California Health Survey was able to meet several special requests for such current data. Some of these needs for information arose out of the evaluation and redirection of programs which had been active for some years. Others came from new projects which the State Department of Public Health was undertaking. This chapter will present examples of such immediate applications of data from the Survey.

Acute Communicable Diseases

Survey data and methods are of especial usefulness now to the Bureau of Acute Communicable Disease of the State Department of Public Health in the revising of its system for reporting current morbidity. The revision being made to meet changing problems in the field of the acute communicable diseases will make a basic change in the local-state relationship established by the existing system for reporting of notifiable diseases. Under the present system, physicians report cases of certain listed diseases to the local health department, then after review and any necessary local action, the local health department transmits the case reports to the State Department of Public Health. Under the proposed plans the local health departments will have the responsibility for assembling and processing data for cases of certain diseases regardless of the level of action indicated—local, state, federal. The role of the State will be primarily to collate and analyze local health department data so as to develop a broad epidemiological picture—in respect to occurrence by time, place and type of person affected.

In addition the State Department of Public Health will develop special reporting systems in local areas having particular problems, for example, diarrheal disease in the resort areas of the mountains, and encephalitis in the Central Valley. Statewide surveillance will be undertaken for diseases with no particular geographic concentration, such as measles, mumps and chickenpox. For this statewide surveillance the State proposes to supple-

INCIDENCE OF SELECTED REPORTABLE DISEASES
CALIFORNIA, 1954

REPORTABLE DISEASE	RATES PER 100,000 PERSONS PER YEAR DERIVED FROM	
	California Health Survey	Regular Reporting System
Chickenpox (varicella)	1,500	384
German measles (rubella)	1,800	57
Influenza, epidemic	12,100[a]	3
Measles	1,100	490
Mumps	1,300	286
Streptococcal infections, respiratory, including scarlet fever	1,400[a]	68

[a]Does not necessarily correspond to reportable condition.

Note: Cases from California Health Survey are for interview period May, 1954 to April, 1955, covering calendar period April, 1954 to April, 1955. Cases from Acute Communicable Diseases' reports are those reported in California for 1954.

ment the traditional reporting system with a household survey sample to provide a more accurate picture of the extent and distribution of these diseases. The need for this supplementation is apparent from analysis of California Health Survey data. The table on page 48 compares the incidence of selected diseases as obtained from the regular reporting system and as derived from the California Health Survey.

The incidence rates of measles, mumps and chickenpox based on Survey data are approximately two to four times higher than the rates based on the usual morbidity reports. The existence of underreporting of certain communicable diseases by the traditional reporting system is not a new finding; however, the Survey data document it in California and indicate its extent.

DAYS OF DISABLING ILLNESS

DIAGNOSIS[1]	RATE PER 1,000 PERSONS PER YEAR
Infectious and Parasitic Diseases	1,270
Active tuberculosis	160
Arrested tuberculosis	60
Common childhood diseases	670
Other	380
Respiratory	4,740
Common cold, sore-throat, cough and nasopharyngitis	3,130
Bronchitis and chest cold	710
Pneumonia	170
Chronic tonsillitis and sore-throat	270
Chronic sinusitis	130
Other	330
Gastro-intestinal, Selected	590
Dysentery and diarrhea	60
Intestinal flu	530

[1]See Appendix D, Group Coding of ISC Classifications.

The use of survey data helps meet the need for describing the epidemiologic pattern of conditions such as acute respiratory disease and acute gastrointestinal disease which are not adequately covered by the present reporting system.

The accompanying table indicates the extent of disabling illness from several communicable diseases, as shown in the Survey.

Inspection of these data suggest that those concerned with communicable disease control should devote increased effort toward control of the so-called minor communicable diseases. In the aggregate these common communicable respiratory and gastrointestinal diseases cause far more disabling illness than do the specific reportable diseases with which public health effort has been largely concerned. Data from the California Health Survey reveal not only the magnitude of these conditions but also their distribution in the population. The information thus gained is facilitating a reorientation of the communicable disease control program, as evidenced already by the proposed changes in the basic reporting system.

In 1956 the Bureau of Acute Communicable Diseases used the survey technique for collecting information on the extent of immunization against poliomyelitis within the various population groups and on the attitudes of mothers toward the Salk vaccine. The findings of this survey guided the department in formulating the 1957 Poliomyelitis Immunization Program by pointing out the specific population groups that had not availed themselves of immunization and the reasons why they had not done so.

This survey also collected information on smallpox and diphtheria, pertussis, tetanus immunizations and on the tonsillectomy experience of the population.

Air Pollution and Health

During the fall months of 1954, the Governor of California called upon the State Department of Public Health to ascertain what harmful effects on health might be caused by air pollution. A prolonged episode of smog in Los Angeles had aroused intense public interest in this problem. Concern was expressed that disasters of the type which had occurred in Donora, Pennsylvania and London, England might occur in California, and that adverse effects on health might already be appearing.

The California Health Survey was then in progress and afforded a unique opportunity to observe any quantitative effect of air pollution on the general population. For this purpose the sample in the Los Angeles area was augmented for the latter months of 1954 as one procedure for determining whether air pollution was resulting in a measurable increase of illness. Other indices of possible air pollution effect were also studied: mortality of persons beyond 65 years of age; mortality of patients in nursing homes; admissions to hospitals; and the sickness experience of selected groups of the population, such as industrial workers and school children.

Smog had been reported to aggravate common respiratory conditions, such as asthma and bronchitis. Experience in the Donora, Pennsylvania and London air pollution disasters had shown older persons to be most seriously affected.

Analysis of the California Survey data revealed no increase in respiratory illness, no rise in illness among elderly persons, nor any other indication of an immediate health effect associated with the

episodes of smog in Los Angeles during the fall of 1954. The first report on air pollution by the Department, "Clean Air for California," incorporated this finding with the notation that the measures used were quite crude for the purpose and that further work should be done.

The Legislature appropriated funds for continuing study of the possible health effects of air pollution, including that based upon population surveys. Accordingly the Department undertook during 1956 a statewide household sample survey to describe:

1. The general level of smog awareness in the different communities in California, including descriptions of those communities where a large or a small proportion of their population reported the presence of smog.
2. The extent to which smog is seen as a disrupting element in the lives of residents in various communities.
3. The specific kinds of effects the population attributes to smog.
4. The characteristics of people reporting various smog effects including factors determining variability in individual perceptions of the effects of smog.

Tabulations of the results of this 1956 survey have not yet been completed.

The 1956 survey is providing an additional means of studying the health effects of air pollution, a way to test the impression held by many clinicians that smog aggravates the condition of patients with respiratory disease. From the survey population, a roster of persons with bronchitis and related disorders is being assembled. Information obtained by interview with the patients and (with the patients' permission) their physicians will permit the division of the patients into two groups of comparable age, disease—severity and other characteristics—one group residing in a smog area and the other in a smog-free area. Followup will be maintained for several years on the course of illness in the two groups. This study will, it is expected, yield data indicating whether or not bronchitis patients who live in a smog area suffer greater progression of their disease and more ill effects from it, than do similar patients who live in smog-free area.

Evaluation of Child Health Services

Maintenance of child health is a basic public health goal. Activities directed toward prevention of specific diseases, improvement of nutrition, and detection and correction of handicapping conditions have occupied a prominent place in the programs of state and local health departments. As one means of providing such services, health departments have developed child health clinics or conferences. Here a physician, assisted by nurses and other personnel, examines well children and offers preventive health supervision. Over the years the character of services in the child health conference has changed according to health needs. In the beginning emphasis was placed on safe milk for babies; later, specific immunization against smallpox, diphtheria and pertussis became an important feature; recently, an increasing amount of attention has been given to accidents and to the emotional aspects of health. Education of the public and of the health professions has always been an important aim of child health conferences.

The illness picture among children has changed remarkably in recent years with public acceptance of milk pasteurization, immunizations for childhood diseases, increased understanding of nutrition in the early years, and other elements of health protection. Because of these changes the Bureau of Maternal and Child Health of the State Department of Public Health has begun a thorough evaluation of child health conferences as they are now being conducted in California. The Department received a grant from the U. S. Children's Bureau for this purpose. The objective of the evaluation is to determine the present health deficits and health maintenance requirements of young children, how clearly the present child health supervisory services are directed toward these deficits and requirements, how well they are being met by the services and how well these services are being utilized by the public. To assist in carrying out this task, the staff for this study requested that the California Health Survey supply data on the nature and extent of illness among young children.

Another use of Survey data was made in the compilation of statistical material for the Maternal and Child Health Chapter of the 1956 Biennial Plan of the State Department of Public Health. This plan as a whole is submitted to the U. S. Public Health Service and the Maternal and Child Health Chapter to the Children's Bureau. These data indicate the kinds of information becoming available to guide and evaluate programs. The table on page 51 provides an example of information available from the California Health Survey. (Also see Appendix E, Tables 5, 10 and 12.) These data illustrate how different an emphasis in prevention and treatment is necessary for children as contrasted with that of the adult population. Respiratory infections, digestive disorders and accidents were major causes of disability for both the preschool (0-4) and the school age (5-14) children.

SELECTED MEASURES OF ILLNESS BY AGE, SEX AND DIAGNOSIS

(Figures are subject to sampling variation)

SELECTED MEASURES OF ILLNESS	DIAGNOSTIC GROUPS							
	Total	Infective and Parasitic Diseases[1]	Neoplasms[2]	Cardiovascular Diseases[3]	Diseases of Respiratory System[4]	Diseases of Digestive System[5]	Accidents[6]	All Other[7]
	Rates per 1,000 persons per year							
0-14 Years								
Incidence of Illness	5,243	260	10	20	2,520	635	1,033	765
Days of Disability[8]	17,340	2,680	120	380	8,810	1,590	700	3,060
Hospital Admissions	41	2	1	-	16	5	6	10
Hospital Days	229	29	4	-	36	38	31	93
15 Years and Over								
Incidence of Illness	5,972	42	38	166	1,523	767	575	2,859
Days of Disability[8]	26,620	690	810	4,150	3,080	2,320	730	14,830
Hospital Admissions[9]	83	2	8	7	6	15	10	35
Hospital Days[9]	1,029	66	79	113	50	153	209	360
Incidence of Illness								
0-4 Years								
Male	5,998	279	7	-	3,143	621	1,307	641
Female	5,631	273	23	8	2,920	698	1,078	631
5-14 Years								
Male	4,973	267	4	35	2,239	577	1,001	850
Female	4,794	233	10	24	2,161	668	858	840
Days of Disability[8]								
0-4 Years								
Male	18,210	1,730	-	-	11,080	1,310	510	3,580
Female	20,910	2,870	250	100	11,720	2,140	510	3,320
5-14 Years								
Male	16,330	3,490	200	270	6,790	1,450	880	3,250
Female	15,610	2,330	20	910	7,660	1,580	760	2,350

Group Codes include: (See Appendix D)
1. 01-04
2. 60-62
3. 30-37, 3R
4. 10-15
5. 20-29, 2x, 2R
6. R0-R5
7. Residual

8. See "Measures used" Appendix C. For all diagnostic groups (except accidents) days of disability includes all illnesses 'bothering' in the past four weeks. (For accidents, includes days of disability for all accidents starting in the past four weeks.)
9. Excludes Deliveries.

Days of disability from specific causes, such as acute respiratory infections, accidents, acute gastrointestinal infections, common childhood infections, dental problems, auditory disorders, skin diseases and allergies ranked high (Appendix F, Table 10). This table indicates that the common respiratory diseases, including those of the ear, far outweigh accidents or the "common childhood diseases" as causes of days of disability among young children. Appendix E, Table 12, points to asthma, hay fever and other allergies as important chronic diseases of the young. There are more medically attended allergic conditions among children than there are medically attended congenital malformations or rheumatic fever.

Medical services for disturbances of speech, hearing and vision are frequently sought for young children and suggest a closer look at the possibilities of prevention and early detection.

In addition to data on illness and injury the Child Health Conference study staff conducted during 1956 a statewide household survey of families with children under six years of age to determine the extent of disordered behavior and development in young children and the utilization of medical health supervision. These data will be related to various social and economic characteristics of the families surveyed. Data from this survey are now being tabulated and analyzed and will appear in another report.

Blindness in California

The State Department of Public Health has recently undertaken, with support from the Kellogg Foundation, a project for the prevention of blindness. The aim of this work is to develop a public health program to curtail loss of sight through utilizing the skills and resources commonly found in state and local health departments. It includes studies of the nature and extent of blindness; early case-finding of conditions leading to blindness, such as glaucoma; epidemiological investigation; and professional and public education.

Highlighting the importance of this problem to the State is the fact that about 12,000 persons in California[1] receive Aid to the Needy Blind, the average payment being $84.66 per month. Calculations based on life expectancy rates indicate that the State will pay cash benefits to persons now on blind pension rolls in the amount of $170,000,000 during their lifetimes. This sum does not include the cost of benefits for persons who will be accepted for blind aid in the future, nor the moneys expended for special educational facilities and other programs for the blind.

A great many cases of blindness can be prevented, for example those arising from infections, accidents, uncorrected amblyopia, administration of excessive oxygen to premature babies, the progress of undetected glaucoma and other conditions. The purpose of the project is to devise means for accomplishing this prevention.

A comprehensive attack on the problem requires a description of the extent and distribution of blindness among all residents of the State. There is quite detailed information concerning the 12,000 persons receiving Aid to the Needy Blind available from the State Department of Social Welfare. Data are also at hand in respect to the blind residing in several State institutions, those receiving workmen's compensation and disability insurance benefits, and those for whom the public schools provide special educational services. However, the California Health Survey provides the first information we have had which is based upon a statewide sample of the whole population.

The staff of the Prevention of Blindness Project has completed an analysis of the Survey data, and prepared a report entitled "Analysis of California Health Survey Reports of Visual Impairment." The report concludes that the Survey data are useful in spite of the difficulties inherent in reports of blindness obtained by the household survey method, such as variations between the concepts and definitions of blindness in the minds of the public from the precise definitions of ophthalmologists. Based on California Health Survey data alone, the following picture of blindness in California can be drawn.

Using the rate of 1.8 obtained from the Survey for 1954, there was an estimated number of about 24,000 blind persons in California in 1956. Approximately half of them are receiving Aid to the Blind from the State Department of Social Welfare. The Survey also indicates a substantial reser-

PERSONS REPORTING LOSS OF VISION[1]

DEGREE OF VISUAL LOSS	RATE PER 1,000 PERSONS PER YEAR		
	All Ages	Under 65 Years	65 Years & Over
Blind in both eyes	1.8	.7	13.8
Vision impaired in both eyes	4.9	2.4	33.2
Blind in one eye	3.5	2.7	12.6
Vision impaired in one eye	4.1	3.1	15.3

[1]Not due to refractive error and not corrected by glasses.

[1] *State Department of Social Welfare, "Preliminary Statistical Release," December, 1954.*

voir of persons already blind in one eye or with impaired vision. From this reservoir a large number of the future blind will come.

Such data, together with information about the blind from other sources, provide the basis for an effective control program.

Epidemiologic Investigation of Coronary Heart Disease

Coronary heart disease, which now causes approximately one-fourth of all deaths in California, is increasingly being recognized as a condition somehow developing out of the conditions of life. No longer do physicians accept this disease as "degenerative" or as an inevitable consequence of aging. Instead, they have noted that coronary heart disease occurs commonly among people following certain ways of life. Also it appears to be increasing as a cause of death, at least among the western nations, and particularly among American men aged 35 to 64 years.

What are the causes? This question is attracting the intense interest of epidemiologists and other research workers all over the world. Various suggestions are being made for investigation and some of the evidence advanced points to patterns of diet, too little physical exertion, mental stress from the conditions of modern life, cigarette smoking, and others as possible etiologic factors. However, an important limitation of most studies that have been made is that they are based upon selected groups of persons with the disease. For example, some studies of coronary heart disease pertain only to those who died from it, or to those coming to a particular facility for treatment, or to those in the armed services. Whether and how much the selection of study material affects the findings is difficult to estimate.

The California Health Survey presented an opportunity for the State Department of Public Health to undertake an epidemiologic study of coronary heart disease based upon a total population sample. Certain limitations must be recognized in the use of Survey data for the epidemiologic study of coronary heart disease. Among the limitations are respondent's lack of knowledge about the doctor's diagnosis, and difficulties in reducing responses to a code. However, these limitations are not so serious when it is recognized that they tend generally in the direction of underreporting. Since the health survey population naturally does not include those who died, the "sudden death" coronary cases do not appear.

The Survey offered several possibilities for descriptive epidemiology of coronary heart disease as it appears among persons who survive the disease. From the data occurrence in various age and sex groups, according to type of employment, income and other factors, can be obtained. These

PERCENT OF PERSONS REPORTED TO HAVE CORONARY HEART DISEASE IN CALIFORNIA HEALTH SURVEY BY AGE AND SEX

	Total	Age Groups								
		35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-84	85 & over
Total	100	2	5	4	8	15	20	17	13	14	2
Male	100	3	7	6	11	15	20	13	13	10	2
Female	100	1	2	2	3	15	20	23	13	18	3

[1](ISC 420.0, 420.1 and 420.2)

data supplement those available from mortality statistics and assist in determining whether those who die from the diseases have characteristics different from those who live after its onset.

The California Health Survey provided a roster of persons reported to have had coronary heart disease. This roster was used to make estimates of rates for the total population. The distribution of this roster by age and sex indicates that the cases under study correspond generally with those derived from mortality data and clinical series.

To assist in ascertaining how the persons with coronary heart disease differ from other persons in the population, the California Health Survey also was used to select a control group of persons who reported no coronary heart disease but were similar in age and sex to those who reported having the disease. Interviews are now proceeding with these two groups—patients and controls—to determine how they differ with respect to diet, exercise, cigarette smoking and other factors suspected of playing a role in the disease. Checks also are being carried out with physicians named by Survey respondents, to determine the extent of validity of the diagnosis reported by the respond-

VERIFICATION OF INFORMANT'S STATEMENT OF CORONARY HEART DISEASE BASED ON PHYSICIANS' REPORTS

	TOTAL		MALE		FEMALE	
	Number	Percent	Number	Percent	Number	Percent
Total persons reporting CHD	250		150		100	
Total persons with physi-report available	175	100	107	100	68	100
Verified not CHD	35	20	10	9	25	37
Verified as CHD	140	80	97	91	43	63

ents. Based on work in progress the verification of diagnoses is shown in the accompanying table.

In addition to the roster of persons with specifically reported coronary heart disease, the Survey revealed another group of persons reported to have heart disease, type unspecified. Preliminary investigation of these patients suggests that about one-third of them will be confirmed by the attending physician as having coronary heart disease. Those confirmed as having coronary heart disease, together with controls matched for age and sex, will also be interviewed to determine the presence or absence of suspected associated factors.

Finally, comparable information is to be sought from family members of persons who did not report the disease at the time of the Survey and yet died from coronary heart disease within one year after the Survey. Thus information will be available from three groups in the Survey population: those reporting coronary heart disease; those reporting heart disease (type unspecified), confirmed by attending physicians as coronary heart disease; and those not reporting coronary heart disease at the time of the Survey but whose death certificates gave coronary heart disease as the underlying cause of death. Analysis of the data from these various groups will permit examination of several hypotheses as to the etiology of occurrence of coronary heart disease, an examination based upon a total population sample rather than a selected series.

Home Safety Project

For the past three years the State Department of Public Health under a grant of funds from the Kellogg Foundation, has been assembling data on accidental injuries in California and conducting research on methods of collecting further information about accidents which can be applied to accident prevention programs. Such programs have been impeded by the fragmentary nature of information about accidental injuries. Isolated studies had been conducted in certain local areas, with data limited to emergency hospital reports. These studies were not designed to provide information about the accident experience of the general population. In order to answer some of the basic questions involved in starting a statewide program of accident prevention, the staff of the Home Safety Project turned to the California Health Survey. Through the Survey, it was possible to obtain statewide information on nonfatal accidents.

For each accident reported, the Survey obtained a description of how and where the accident happened. This enabled the Home Safety Project to classify the accidents according to a code the project staff designed to give a more complete description of nonfatal accidents than the traditional classification of the International Statistical Classification of Diseases, Injuries and Causes of Death. The Project studied in some detail factors relating to each of these types of accidents.

For each accident, the Survey also obtained information on medical attendance, hospitalization and disability. One of the most useful measures of the severity of accidental injuries is the amount of disability caused. An injury was defined as "disabling" if it kept an individual in bed, prevented him from going out of doors, or otherwise interfered with his usual activities. An example of the data obtained is presented in the following table.

INCIDENCE OF ACCIDENTS AND PERCENT DISABLING

Age and Sex	Rate per 1000 Persons Per Year	Percent Disabling
Total, All Ages	708	20
Male	772	21
Female	648	18
0 - 4 years, total	1178	12
Male	1293	12
Female	1055	13
5 - 14 years, total	932	22
Male	1010	21
Female	848	25
15 - 44 years, total	668	21
Male	789	25
Female	562	16
45 - 64 years, total	472	18
Male	415	19
Female	528	18
65 years and over, total	406	27
Male	311	23
Female	493	29

The incidence of accidents shows a consistent decline with age. Children under five have the highest rate, slightly over one accident per child per year. However, these very young children have a lower proportion of disabling accidents than do the older age groups.

The table on page 55 shows the distribution of injuries resulting from accidents. "Superficial injuries and contusions" and "lacerations and open wounds" are the most common types of injuries; "sprains and strains," although less common, are more likely to cause disability. Males have rates approximately equal to or higher than the rates for females for all major injury except for burns. When disabling accidents are considered, males have about the same or higher rates than females, for all types of accidents.

INCIDENCE OF ACCIDENTS BY TYPE OF INJURY AND DISABILITY

TYPE OF INJURY	RATES PER 1000 PERSONS PER YEAR			
	TOTAL		DISABLING	
	Male	Female	Male	Female
Fractures and Dislocations	26	22	12	13
Sprains and Strains	98	84	35	34
Lacerations and Open Wounds	208	148	34	24
Superficial Injuries and Contusions	243	221	18	19
Burns	47	77	15	6
All Others	150	94	44	24

It was also possible through questions included in the interview schedule at the request of the Home Safety Project to classify these accidents in detail with respect to where the accident occurred. The results of the Survey bring out the importance of the home in the total accident problem. The accompanying table indicates the magnitude of the problem for disabling and nondisabling accidents.

As might be expected, males have a higher away-from-home accident rate than females, while females show a higher rate than males for home accidents. This is true for disabling as well as nondisabling accidents.

INCIDENCE OF ACCIDENTS BY PLACE OF OCCURRENCE AND DISABILITY

	RATES PER 1000 PERSONS PER YEAR					
	Total		Home		Away from home	
	Male	Female	Male	Female	Male	Female
Total	772	648	322	423	450	225
Disabling	158	119	49	70	109	49
Not disabling	613	527	272	353	341	174

A number of items of demographic information gathered as a regular part of the California Health Survey schedule provide interesting leads to prevention. The opposite table shows the incidence of accidents by usual activity, age and whether the accident occurred at work, at home, or away from home.

In spite of a lower off-the-job accident rate, blue collar workers have a higher total rate than white collar workers. Younger workers have a higher rate than older workers, and this is true for both white collar and blue collar workers. Housewives and "other" (which includes preschool children, retired persons, and a few people who are "unable to work") have the highest rates for home accidents and the highest proportion of their accidents at home.

Those parts of the data giving information on the manner of occurrence and the location of the accident provide some of the best leads for planning accident prevention. Parts of the data available from the survey are valuable as a measure of the size of the accident problem and the need for planning accident prevention activities. California Health Survey information provides measures of the relative importance of motor vehicle and nonmotor vehicle accidents and of occupational and nonoccupational accidents. The Survey also furnishes information as to the race, marital status, family income, migrant status, and household composition of the injured persons, as well as other population characteristics, measures of severity, and other factors related to the accident.

When the Home Safety Project publishes its report of the analysis of these data, it will provide the most accurate and most complete picture of the incidence of nonfatal accidental injuries for an entire state population that is available anywhere at this time.

INCIDENCE OF ACCIDENTS BY USUAL ACTIVITY AND PLACE OF OCCURRENCE

USUAL ACTIVITY	RATES PER 1,000 PERSONS PER YEAR				
	Total	At Work	NOT AT WORK		
			Total	Home	Away from home
Total	708	106	602	386	215
Worker, Total	620	283	337	172	165
15 - 44 years	712	338	374	184	191
45 years and over	471	193	278	155	123
White collar	554	166	388	206	182
15 - 44 years	623	196	428	214	214
45 years and over	450	121	329	196	133
Blue collar	684	396	288	140	148
15 - 44 years	795	470	325	156	169
45 years and over	494	268	226	113	113
Housewife	552	-	552	436	117
15 - 44 years	580	-	580	471	109
45 years and over	519	-	519	393	127
Student	848	-	848	418	430
Other	890	-	890	666	225

Unpublished Data Available for Use

The preceding sections have dealt with actual uses of the Survey data that have been made within the California State Department of Public Health. In addition, a large amount of unpublished information is available for use. Some of this information has already been tabulated. Some of these data are applicable to specific interests, while some of it may serve even broader interests.

Very little of the available Survey data on health of workers is presented in this monograph. Information was obtained on the health and medical care of workers in broad occupational and industrial classes, and by whether the worker receives pay for time lost from work because of illness.

Of even more general interest are the Survey data obtained about the health of veterans, persons with differing degrees of education, smokers, and members of households with differing numbers and age compositions. The health of persons with various combinations of characteristics should provide promising leads for further epidemiologic research. An example would be divorced persons with a particular family income or occupational status.

The present monograph has described health and medical care among Californians in broad terms. It is hoped that this brief cataloguing of the information available from the Survey will stimulate many others to make additional detailed analyses and still further use the vast amount of data which was collected.

CHAPTER 7

METHODOLOGICAL QUALIFICATIONS

CHAPTER 7

METHODOLOGICAL QUALIFICATIONS

Introduction

While the California Health Survey was designed to obtain needed morbidity and related population information on a statewide basis, it also further investigated and evaluated methods of measuring morbidity. Some of the results of the methodological investigations are presented in this section. In addition a brief description appears of the sample design and the sampling variation tables with examples of their use.

Sources of Variation—Nonsampling

There are two main sources of variation in estimates made from data based on sample surveys. One source results from the fact that a sample of the population has been interviewed, rather than the whole population. Such sampling variation and its effect will be discussed in a later section. The other source is nonsampling variation and includes such things as errors in observation, errors in measurement, and various types of response errors. These nonsampling variations would be present even if the entire population had been interviewed. Nonsampling variations may give biased results if the errors are systematic. However, if the errors are random they may cancel each other. The magnitude of the nonsampling variation is usually unknown.

Some of the causes of nonsampling variation may be classified as falling into three general areas:

1. The interview
   a. There may be differences in interviewing skill between interviewers.
   b. Certain types of information, such as asymptomatic or socially tabooed conditions, may be difficult or even impossible to obtain by personal interview.
2. The respondent
   a. Persons who refuse to be interviewed or who are not at home may have different illness patterns from persons who are interviewed.
   b. If the period covered by the inquiry is long, the respondent may not correctly remember illnesses which occurred early in the period.
   c. Misunderstanding of the questions being asked may arise from language or other communication difficulties.
   d. The choice of the appropriate respondent may influence the estimates presented, since the respondent may not be able to accurately report the illnesses of other household members.
3. The processing
   a. Human errors in coding, punching, tabulating, or computing will be present to some extent.
   b. There may also be mechanical errors in processing the data.

Only two of the nonsampling variation problems will be examined here in any detail: persons who were not interviewed for various reasons, and the choice of an appropriate respondent.

Noninterviews

A major problem for surveys is to obtain as high a rate of response as possible. This survey divides the noninterviews into two main categories: Type A—Those where persons in the household could potentially be interviewed but either refused or could not be interviewed for other reasons. Type B—Those where a household no longer existed but whose address was included in the sample.

Type B addresses comprised 18 percent of the sample. The above table indicates the reasons why no one at these addresses could be interviewed. The Type A households (where persons could have been interviewed) comprise only 3 percent of the address samples, with refusals being only about 1 percent of the sample.

TYPE A—NONINTERVIEW

When a questionnaire had to be classified as a Type A noninterview, the interviewer obtained elsewhere as much information about the composition of the household as possible (number of residents, age, etc.). With the information about

PERCENT OF SAMPLE LISTINGS BY TYPE OF COMPLETION OF INTERVIEW

	PERCENT
Total	100.0
Complete	79.2
Type A - Non-Interviews	3.1
Not at home - repeated calls	.8
Not at home - for survey	.5
Refusal	1.1
Other	.7
Type B - Non-Interviews	17.7
Vacancy	9.8
Commercial purposes	.4
Occupied by non-residents	2.1
Demolished	1.7
Under construction	1.0
Merged	.1
Other	2.6

composition, substitutions were made to complete the interview by using the information from a completed interview which matched the household composition of the Type A noninterview.

In an attempt to measure the representativeness of the substitutions, a comparison was made between the substitutions and the interviews which were originally classified as Type A, but were later obtained. For about half the Type A addresses, a completed interview was finally obtained.

The interviews which were originally Type A but were later completed are very similar to the artificially completed interviews. The Type A substitutions and those originally Type A but later completed differ from the completed interview in that they have slightly more illnesses reported. It appears that the Type A substitutions were probably representative of the interviews not obtained.

Post Enumeration Survey

INTRODUCTION

As a part of the survey technique a subsample of the Survey population was selected and reinterviewed for the purpose of shedding light on some of the nonsampling variations.

This phase, called the Post Enumeration Survey,[1] was conducted concurrently with the Survey from the 12th week through the 52nd final week.

[1] *Comprised approximately 1/12 of the total sample: ¼ of the sample area segments and ⅓ of the sample addresses in these segments. An interview was conducted for (1) each adult not responding for self originally, (2) one-half of all other household members, including children.*

SELECTED COMPARISONS OF TYPE A SUBSTITUTIONS

	TYPE OF INTERVIEW		ORIGINALLY TYPE A-NOW COMPLETED INTERVIEWS	
	Completed Interviews	Type A Substituted Interviews	Substituted Interviews	Completed Interviews
Percent of total interviews	96.2	3.8	1.4	1.4
	RATE PER PERSON PER YEAR			
Days of disability	24.1	25.2	21.2[a]	24.7
	PERCENT			
With no conditions reported	37	31	36	38
With no illness in past weeks	12	11	9	11
With illness past four weeks	51	58	55	51
No disability	32	39	38	33
One or more days disability	19	19	17	18

[a] Due primarily to the fact that the female substitutions had few days of disability.

PERCENT OF MATCHED SAMPLE NOT INITIALLY RESPONDING FOR SELF
BY AGE, SEX AND DEMOGRAPHIC CHARACTERISTICS

POST ENUMERATION SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	TOTAL	INCOME			USUAL ACTIVITY						HEALTH INSURANCE	
					Worker							
		Less than $2,000	$2,000-4,999	$5,000 and Over	White Collar	Blue Collar	Housewife	Student	Unable to Work	Something Else	None	Some
15 Years and Over	31	18	33	34	44	48	10	11	33	28	31	28
Male	49	28	54	53	59	55	-	12	26	27	42	55
Female	15	10	13	17	19	26	10	10	40	33	17	13
15-44 Years	31	15	33	32	41	52	8	11	a	36	32	31
Male	50	27	55	49	55	55	-	12	a	a	48	52
Female	14	5	14	16	20	40	8	10	a	a	17	13
45-64 Years	31	20	31	38	54	44	10	-	a	a	25	36
Male	55	a	56	68	68	57	-	-	a	a	39	67
Female	11	11	9	14	20	9	10	-	a	a	11	11
65 Years and Over	28	18	40	41	a	a	16	-	a	26	26	33
Male	33	27	a	a	a	a	-	-	a	23	30	38
Female	23	11	a	a	a	a	16	-	a	a	23	a

AGE AND SEX	TOTAL	RACE				MARITAL STATUS				MIGRANT STATUS		
										Last Moved to California		
		White and Unknown	Negro	Spanish Surname	All Other	Married	Widowed	Divorced	Never Married	Never Outside	Before 1946	1946 and After
15 Years and Over	31	30	30	39	a	35	18	15	25	33	30	30
Male	49	49	41	60	a	63	11	15	20	46	50	50
Female	15	14	23	19	a	11	20	14	33	21	14	12
15-44 Years	31	31	27	37	a	34	a	15	27	33	29	32
Male	50	50	a	a	a	64	a	15	23	48	55	48
Female	14	14	20	14	a	10	a	14	32	21	11	14
45-64 Years	31	31	a	a	a	37	12	10	a	26	33	26
Male	55	55	a	a	a	67	a	a	a	a	56	a
Female	11	10	a	a	-	9	15	a	a	a	12	5
65 Years and Over	28	26	a	a	a	36	17	a	a	a	27	24
Male	33	32	-	a	-	42	a	a	a	a	25	a
Female	23	22	a	-	a	27	20	a	a	a	28	14

[a] Percents not computed on a base for less than 25.

SELECTED COMPARISONS BY WHETHER OR NOT THE PERSON RESPONDED FOR HIMSELF ON INITIAL INTERVIEW

POST ENUMERATION SURVEY

(Figures are subject to sampling variation)

	DID NOT RESPOND FOR SELF		RESPONDED FOR SELF		CHILD		PERCENT INCREASE OVER INITIAL INTERVIEW		
	Initial Interview	Re-interview	Initial Interview	Re-interview	Initial Interview	Re-interview	Did not Respond for Self	Responded for Self	Child
	INCIDENCE OF ILLNESS[1]								
Total	5,181	7,223	6,738	8,014	5,996	7,800	39	19	30
No disability	3,894	5,370	5,135	6,411	2,977	4,487	38	25	51
Disability	1,287	1,853	1,603	1,603	3,019	3,313	44	-	10
Acute Illness	3,077	3,862	3,354	3,740	4,403	5,494	26	12	25
No disability	2,135	2,669	2,612	2,998	1,761	2,726	25	15	55
Disability	942	1,193	742	742	2,642	2,768	27	-	5
Chronic Illness	2,104	3,360	3,384	4,274	1,593	2,306	60	27	45
No disability	1,759	2,701	2,523	3,413	1,216	1,761	54	35	45
Disability	345	659	861	861	377	545	91	-	45
	DAYS OF DISABILITY[1]								
Total Illness	22,550	28,890	36,340	38,590	18,760	20,320	28	6	8
Acute	4,370	4,740	5,290	5,350	13,460	14,470	9	1	7
Chronic	18,180	24,150	31,050	33,240	5,300	5,850	33	7	10
	PERSONS ILL IN A 4 WEEK PERIOD[2]								
Total	1,000	1,000	1,000	1,000	1,000	1,000	-	-	-
Persons with no illnesses in past 4 weeks	495	374	372	324	510	419	-24	-13	-18
Persons with illnesses in past 4 weeks	505	626	628	676	490	581	24	8	19
	PERSONS WITH CHRONIC CONDITIONS[1]								
Total	1,000	1,000	1,000	1,000	1,000	1,000	-	-	-
No chronic conditions	464	314	370	342	703	590	-32	-8	-16
Chronic conditions	536	686	630	658	297	410	28	4	38
Causing no limitation	379	500	470	505	284	387	32	7	36
Causing limitation	157	186	160	153	13	23	18	-4	a
Groups 1 & 2	46	43	46	43	-	-	-7	-7	-
Groups 3 & 4	111	143	114	110	13	23	29	-4	a
	CHRONIC CONDITIONS[1]								
Total	843	1,430	1,436	1,786	421	611	76	24	45
Diagnosis									
Cardiovascular	72	106	84	95	10	13	47	13	a
Respiratory	68	152	125	193	61	104	124	54	70
Arthritis and rheumatism	39	77	105	125	3	6	97	19	a
Other neuromuscular and bone diseases	94	145	95	109	13	10	54	15	a
All other	570	949	1,023	1,257	330	476	66	23	44
Causing no limitation	652	1,222	1,214	1,582	408	589	87	30	44
Causing some limitation	191	208	223	205	13	23	9	-8	(a)
Groups 1 & 2	58	60	70	70	-	-	3	-	-
Groups 3 & 4	133	147	152	134	13	23	11	-12	(a)

1 Rate per 1,000 persons per year.
2 Rate per 1,000 persons per 4-week period.
a Percent not computed where rates less than 25 per 1,000.

Note: For weeks of interview 12-52. For matched population only. Excludes persons who should have been included on initial interview but were omitted and also excludes persons who should have been omitted on the initial interview but were included.

The PES had three main objectives: (1) to measure the effect on the Survey statistics of not interviewing all adults for themselves; (2) to determine how well the Survey procedures had been followed; and (3) to measure the error in the coverage of the population arising from such things as deviations in listing and sampling. This discussion will be confined to the first of these objectives since the other two were used to provide current checks while the staff was still in the field.

The reinterviewing itself gives rise to some additional sources of variation which are detected when the initial and reinterview information is compared. Some of the variations perculiar to the process of taking two interviews are:

1. The reinterview may act as a probe and elicit additional illnesses.
2. There may be difference in skill between the initial interviewers and the reinterviewers.
3. The inevitable time lag between the initial interview and the reinterview may introduce some memory problems on the part of the respondent.

In the following brief analysis it has been necessary to assume that these factors do not introduce systematic errors into the results. However, it is recognized that this is a possibility and therefore the following results should be treated as approximate only. Nevertheless, the results suggest that especial attention should be given to choosing of an appropriate respondent when planning future morbidity surveys,[1] particularly while still in the pretest stage.

SELECTED FINDINGS[2]

Adults "not responding for themselves" (NR) on the initial interview were highly concentrated within certain population groups. Males who were married, working, had some health insurance coverage, and whose yearly family income was $5,000 or more, were those most likely to have another adult respond for them on the initial interview. (See table page 60.)

Selected comparisons for each type of rate presented in the monograph are made in the table on page 61 and show the results of reinterview. It had seemed logical to presume that a reinterview would act like a probe and would result in an increase in the total number of conditions reported. It had also been anticipated that the increase would be primarily for minor conditions, that is, conditions which did not cause any disability as defined in this survey. (See Glossary, Chapter 3.)

The findings only partly bore out the original presumptions. The tabulations of incidence of illness did show that all respondents upon reinterview reported an increased number of illnesses, particularly episodes of chronic illness. However, only those adults who had not initially responded for themselves reported an increased number of *disabling* illnesses. The increase in disabling illnesses for these persons is substantial, and is greater for chronic than for acute disabling illnesses. Both categories of respondents reported an increased number of days of disability, but again the increase for NR adults is substantially greater, particularly for days of disability attributed to chronic illness. As far as chronic conditions are concerned, the extent of under-reporting is greater for the "respiratory" and "arthritis and rheumatism" diagnoses.

A METHOD FOR OBTAINING ADJUSTED RATES

The following formula was developed to obtain an approximation of adjusted rates based on the Post Enumeration Survey data:

$$\text{Adjusted specific rate} = \left\{ \begin{array}{l} 1 + (\%\,NR)\ (\%\ \text{increase over initial interview for } NR) \\ + (\%\,R)\ (\%\ \text{increase over initial interview for } R) \end{array} \right\} \text{original specific rate}$$

where NR = person not responding for self
R = person responding for self

NOTE: The percent NR and percent R comes from the table on page 60, and the percent increase over initial interview for the NR and R groups from the table on page 61.

EXAMPLES OF ADJUSTED SPECIFIC RATES

Males 15 years and over

Incidence of disabling illness—
$$[1 + (.49)\ (.44) + (.51)\ (0)\ ]r = 1.22r$$

Days of disability—
$$[1 + (.49)\ (.28) + (.51)\ (.06)\ ]r = 1.17r$$

Chronic conditions—
$$[1 + (.49)\ (.76) + (.51)\ (.24)\ ]r = 1.49r$$

---

[1] *Two points should be closely examined in deciding on an appropriate respondent:*

(a) The pretest should be designed so that comparisons can be made between subgroups not likely to respond for themselves (see table, p. 83) in order to determine the size of the error which would be introduced by having another household informant.

(b) Work done in other survey fields suggests that savings can be made in the cost of getting interviews from each adult member of a household if the numbers of households is increased in each cluster to be interviewed and the person to be interviewed in each household is designated beforehand.

[2] *This discussion will omit children since they were responded for by an adult on both interviews.*

Females 15 and over

Incidence of disabling illness—
$$[1 + (.15)\ (.44) + (.85)\ (0)]r = 1.07r$$

Days of disability—
$$[1 + (.15)\ (.28) + (.85)\ (.06)]r = 1.09r$$

Chronic conditions—
$$[1 + (.15)\ (.76) + (.85)\ (.24)]r = 1.32r$$

Sources of Variation—Sampling

Sample Design

The sample was designed and the interviewing carried out by contract with the U. S. Bureau of the Census in the name of the State Department of Public Health. Only brief description of the sample design is presented here. The sample of persons enumerated represents the entire population of California from May, 1954, to April, 1955, exclusive of military and civilian persons residing on military installations. Although somewhat different procedures were used in the selection of the sample for different segments of the population (rural areas, areas with extensive new construction since 1950, and so forth), in each case the selection was performed with known probabilities so that estimates could be prepared with calculable precision.

The various parts of the sample were selected in such a manner that they resulted in a uniform sampling rate of 1 in 385 for the year of the survey. For purposes of enumeration, the sample was divided into 52 representative subsamples, and a different subsample was interviewed during each week of the survey year, so that each week's enumeration was based on a sampling rate of 1 in 20,020. Dividing the total sample into 52 equal parts provided considerable flexibility for the Survey. Because of this flexibility, it was possible to add some questions, such as those on physician visits and home nursing care during the last 13 weeks of the Survey. This division into subsamples also made it possible to combine the processing of several weeks data and furnish estimates on a monthly basis. Such estimates, of course, have larger sampling variations than estimates based on the entire year.

Computation of Sampling Variation

Since the rates presented in the monograph are based on a sample, they may differ somewhat from the figures that would have been obtained if every household in the State had been interviewed using the same questionnaire, instructions and interviewing methods. Variations of this type can be measured and in this monograph will be referred to as sampling variations.

Sampling variations were not computed for the Post Enumeration Survey. Therefore, an estimate for sampling variations for the adjusted rates cannot be computed. For that reason, it is not possible to set bounds around a single adjusted rate or to test whether two adjusted rates are statistically significantly different.

The figures presented in the sampling variation tables which follow represent twice the coefficient of variation (V): (twice the coefficient of variation corresponds to the 95 percent level of confidence—see *Discussion*, p. 65.) The coefficient of variation of a rate is defined as the standard error of the rate divided by the rate, or

$$V_r = \frac{S_r}{r}.$$

This ratio is commonly multiplied by 100, so that it can be expressed as a percent.

The basic formula for the coefficient of variation for the types of estimates presented in this monograph (ratio estimates of the form $r = \frac{x}{y}$ where both x and y are random variables) is as follows:

$$V_{\left(\frac{x}{y}\right)} = \sqrt{V_x^2 + V_y^2 - 2V_{xy}}$$

The reasoning by which computational formula was derived from this basic formula follows:[1]

An estimate of the sampling variation can be made by regarding each week's sample as a stratum and making the computation by using the differences between all possible pairs of contiguous strata. This reduces the effect of trend. Then an estimate of the squared coefficient of variation for a given rate, $r = \frac{x}{y}$ is given by

$$V_r^2 = \frac{1-f}{n}\left[\frac{\sum^{n-1}(x_i - x_{i+1})^2}{2(n-1)\bar{x}^2} + \frac{\sum^{n-1}(y_i - y_{i+1})^2}{2(n-1)\bar{y}^2} - \frac{\sum^{n-1}(x_i - x_{i+1})(y_i - y_{i+1})}{(n-1)\bar{x}\,\bar{y}}\right]$$

[1] *M. Hansen, W. Hurwitz and M. Madow*, Sample Survey Methods and Theory, *Vol. 1, p. 166. Much of the derivation of the computational formula from this basic formula is outlined on pages 505 and 506 of this same reference.*

where

x_i = dependent variable for any week—i.e. illnesses, conditions, hospital admissions, etc.

y_i = independent variables for any week—population

n = number of weeks (or strata) = 52

f = sampling fraction = $\frac{1}{385}$

By substituting the following:

$$r = \frac{\bar{x}}{\bar{y}} \text{ where } \bar{x} = \frac{\sum_{i=1}^{52} x_i}{n} \text{ and } \bar{y} = \frac{\sum_{i=1}^{52} y_i}{n}$$

and

$$\Sigma d_x = \sum_{i=1}^{51} (x_i - x_{i+1})$$

$$\Sigma d_y = \sum_{i=1}^{51} (y_i - y_{i+1})$$

we can obtain the formula:

$$V_r^2 = \frac{1-f}{n(n-1)\bar{x}^2} [\Sigma d_x^2 + r^2 \Sigma d_y^2 - 2r \Sigma d_x d_y]$$

and by using the following approximations: [1]

$$1 - f = 1 - \frac{1}{385} \doteq 1$$

and

$$n(n-1)\bar{x}^2 \doteq n^2\bar{x}^2 = (\Sigma x_i)^2$$

we obtain the working formula used in this survey based on the 52 independent weekly samples.

$$V_r = \sqrt{\frac{\Sigma d_x^2 + r^2 \Sigma d_y^2 - 2r \Sigma d_x d_y}{2(\Sigma x_i)^2}}$$

This V_r will be expressed as a percent multiplied by two to obtain a 95 percent confidence level, and the resulting figure will be referred to in this monographs as *sampling variation.*

Because it would be a formidable job to compute a sampling variation for each rate presented in this monograph, an approximate variation is presented for each type of rate for each major population group. In order to derive the sampling variation tables, the actual sampling variations for a representative range for each type of rate were computed and plotted. Curves were obtained which approximate the actual sampling variation for each group of rates. Following are sampling variation tables and examples of their use for the rates appearing in each chapter.

[1] *These approximations result in a 1.9 percent overestimate of the computed sampling variation.*

Use of Sampling Variation Tables

DISCUSSION

The figures derived from the sampling variation tables enable limits, called the limits of a "confidence interval," to be placed around any of the estimated rates presented in this monograph. This confidence interval indicates the range within which the rate would fall most (95 percent)[1] of the time if many other similar samples were picked, similar interviewing, coding, and other procedures were followed, and the same kind of estimates were made.

Confidence limits can be used to set bounds around a single rate. They can also be used as an approximate, and very quick, measure of whether two rates are actually different or only appear to be so because they were estimated from a sample. If the confidence limits do not overlap, then the two rates can be called statistically "significantly" different. If the limits do overlap, then a longer but more exact method should be used—see example (2) under *Deciding whether two estimated rates are actually different.*

[1] *The tables present figures for twice the coefficient of variation, which corresponds to the 95 percent level of confidence. These figures can be used to obtain any confidence level desired. For instance, dividing the figures presented by two results in a 68 percent level of confidence, or multiplying the figures by 3/2 results in a 99 percent level of confidence.*

EXAMPLES

Setting bounds around a single rate

Rate: Incidence of intestinal flu in the total population equals 182 per 1,000 persons per year (Appendix E, Table 5).

Procedure: In the sampling variation table on incidence, find the row labeled "Total, All Ages" and go along this row to the column headed 150-199, which covers the rate of 182. The figure there is 24, indicating that at the 95 percent level of confidence (see *Discussion*) the variation is plus or minus 24 percent of the rate. The confidence limits are as follows:

$182 + .24(182) = 226$
$182 - .24(182) = 138$

Conclusion: 138 to 226 per 1,000 persons per year represents the range within which the estimated rate for the incidence of intestinal flu among the total population would fall 95 percent of the time, if many similar samples were picked and the same type of estimate were made.

Deciding whether two rates are actually different

As pointed out under the *Discussion*, if the confidence limits placed separately around two rates do not overlap, then the two rates are statistically significantly different. A more exact method of testing whether two rates are different need be used only if the confidence limits overlap. Two examples follow, the first illustrating the confidence interval method and the second illustrating the use of the more exact method necessary because the confidence limits overlap.

Example 1

Rates: Days of disability for all acute illness equals 11.9 per person per year for the 0-14 years age group and 7.1 for the 65 years and over group (Appendix E, Table 9).

Procedure: Place confidence limits around each rate, as outlined under *Setting bounds around a single rate.* The sampling variation for the first rate is 19 percent and it is 27 percent for the second rate. The confidence limits are as follows:

0-14 years old = 9.6 to 14.2
65 years and over = 5.2 to 9.0

Conclusion: Since the confidence limits do not overlap, the 0-14 year age group has a statistically significantly higher number of days of disability per person per year because of acute illnesses than does the 65 years and over age group.

Example 2

Rates: Number of chronic "back conditions" equals 38.8 per 1,000 persons per year for all females and 30.6 for all males (Appendix E, Table 12).

Procedure: Placing confidence limits around the two rates gives the following results:

Females = 33.4 to 44.2
Males = 26.3 to 34.9

The confidence limits overlap, so we need to use a more exact method to test whether or not the two rates are different. The sampling variation ($2V_r$) presented in the opposite table is equivalent to twice the standard error of the rate divided by the rate, or

$$V_r = \frac{S_r}{r}.$$

The formula for the more exact method of testing differences is

$$S_{r_1 - r_2} = \sqrt{S_{r_1}^2 + S_{r_2}^2}$$

where

$S_{r_1 - r_2}$ = standard error of the difference between rate$_1$ and rate$_2$

S_{r_1} = standard error of rate$_1$

S_{r_2} = standard error of rate$_2$

(This relationship is exact only if the two rates are uncorrelated. For positively correlated rates it leads to an overestimate, and conversely for negatively correlated rates it leads to an underestimate.)

Since

$$V_r = \frac{S_r}{r}, \quad S_r = V_r \times r$$

and substituting, we get

$$S_{r_1 - r_2} = \sqrt{(V_1 r_1)^2 + (V_2 r_2)^2}$$

For the example being considered, at the 95 percent level this becomes

$$2S_{r_1 - r_2} = \sqrt{(2V_1 r_1)^2 + (2V_2 r_2)^2}$$

or

$$2S_{(38.8-30.6)} = \sqrt{[(.14)\ (38.8)]^2 + [(.14)\ (30.6)]^2}$$

$$= \sqrt{47.64}$$

$$= 6.9$$

Conclusion: The difference between the two estimated rates is 38.8 — 30.6, or 8.2, which is larger than 6.9. Therefore the chronic condition rate among females for "back conditions" is statistically significantly higher than it is for males.

CHAPTER II

AGE AND SEX

The chances are 19 out of 20 (95% confidence level) that the population rate is within plus and minus the following percent of the sample rate.

PERCENT VARIATION

Age		Sex	
0-14 Years	3.2	Male	1.0
15 Years and over	1.6	Female	1.2
15-44 Years	1.6		
45-64 Years	3.5		
65 Years and over	6.1		

Note: Other demographic characteristics are shown in the sampling variation tables for Chapter V.

CHAPTER III

INCIDENCE OF ILLNESS

The chances are 19 out of 20 (95% confidence level) that the population rate is within plus and minus the following percent of the sample rate:

AGE AND SEX	SAMPLE RATE PER 1,000 PERSONS PER YEAR															
	99 or Less	100-149	150-199	200-299	300-399	400-499	500-599	600-699	700-799	800-899	900-999	1,000-1,999	2,000-2,999	3,000-4,999	5,000-8,999	9,000-12,999	13,000 and Over
	Percent Variation																
Total, All Ages	40	30	24	16	12	10	9	9	8	8	8	7	6	5	4	3	2
Male or Female	43	33	26	20	17	14	12	12	11	10	9	8	7	6	5	4	3
0-14 Years	55	42	34	27	23	18	16	15	14	12	11	10	7	7	6	5	3
15-44 Years	45	35	27	21	18	15	13	12	11	10	9	8	6	6	5	4	2
45-64 Years	65	51	40	31	25	20	18	16	15	14	12	11	8	8	7	5	4
65 Years and Over	80	60	48	38	30	24	21	19	18	16	14	13	10	9	8	6	4

DAYS OF DISABILITY

The chances are 19 out of 20 (95% confidence level) that the population rate is within plus and minus the following percent of the sample rate:

AGE AND SEX	DAYS OF DISABILITY PER PERSON PER YEAR												
	Less Than 0.5	1	2-3	4-6	7-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65 and Over
	Percent Variation												
Total, All Ages	40	20	14	10	8	6	5	4					
Male or Female	50	39	25	18	10	9	8	7	6				
0-14 Years	75	56	38	26	21	19	16						
15-44 Years	59	44	30	21	16	14	12						
45-64 Years	84	63	42	29	23	21	19	17	14				
65 Years and Over	100	75	50	35	27	25	22	20	17	14	12	10	9

CHRONIC CONDITIONS

The chances are 19 out of 20 (95% confidence level) that the population rate is within plus and minus the following percent of the sample rate:

AGE AND SEX	SAMPLE RATE PER 1,000 PERSONS PER YEAR														
	9 or Less	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-199	200-399	400-699	700-999	1,000 and Over
	Percent Variation														
Total, All Ages	30	16	12	10	9	8	8	8	7	7	6	5	4	3	2
Male or Female	34	21	17	14	11	10	9	9	8	7	7	6	5	4	3
0-14 Years	45	27	23	18	15	14	12	11	10	9	7	7	6	5	3
15-44 Years	35	22	18	15	12	11	10	9	8	8	6	6	5	4	2
45-64 Years	50	30	25	20	17	15	14	12	11	10	8	8	7	5	4
65 Years and Over	60	36	30	24	20	18	16	14	13	12	10	9	8	6	4

HOSPITAL ADMISSIONS AND HOSPITAL DAYS

The chances are 19 out of 20 (95% confidence level) that the population rate is within plus and minus the following percent of the sample rate

AGE AND SEX	HOSPITAL ADMISSIONS[1]			HOSPITAL DAYS[1]			AVERAGE LENGTH OF STAY[2]		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
	Percent Variation								
Total, All Ages	5	8	8	12	18	17	13	20	19
0-14 Years	17	21	21	27	39	35	32	44	41
15-44 Years	8	15	10	25	34	22	26	37	24
45-64 Years	8	16	16	16	23	28	18	28	32
65 Years and Over	15	24	24	33	48	47	36	54	53

1 Excluding deliveries of newborn.

2 Figures presented here are an upper limit of the sampling variation.

DOCTOR VISITS

The chances are 19 out of 20 (95% confidence level) that the population rate is within plus and minus the following percent of the sample rate:

AGE	TOTAL	MALE	FEMALE
	Percent Variation		
Total, All Ages	6	8	6
0-14 Years	12	17	15
15-44 Years	11	19	8
45-64 Years	16	25	18
65 Years and over	19	26	25

HEALTH AND MEDICAL CARE FOR DEMOGRAPHIC GROUPS

The chances are 19 out of 20 (95% confidence level) that the population rate is within plus and minus the following percent of the sample rate:

CHARACTERISTICS OF DEMOGRAPHIC GROUPS	PERCENT OF POPULATION	HEALTH						MEDICAL CARE	
		Incidence of Illness		Chronic Conditions			Days of Disability	Hospitalization (excluding deliveries)	
		Total	Disability	Total	Disability	Cause Activity Limitation		Admissions	Days
	Percent Variation								
65 Years and over	6	7	a	4	a	a	10	20	33
All Ages	NA	4	5	3	12	5	4	5	12
Race									
White (excluding spanish surnames)	3	4	5	5	7	5	5	5	12
Spanish surnames	16	13	24	11	22	26	31	27	45
Negro	37	27	29	10	21	19	16	30	60
Other	24	34	45	20	38	48	57	47	91
Income									
Less than $2,000	7	10	12	5	13	4	12	19	30
$2,000-4,999	4	6	12	5	9	8	11	9	24
$5,000 and over	5	5	6	7	12	9	11	8	18
Geographic areas									
Metropolitan	3	5	6	3	10	6	5	5	18
Remainder of State	7	7	9	5	10	9	9	10	16
Health insurance coverage									
None	3	6	8	5	11	10	9	8	15
Some	3	4	6	3	9	8	7	6	13
15 Years And Over	2	4	6	3	14	5	5	5	13
Marital status									
Married	1	4	8	3	8	6	6	6	17
Divorced	7	9	18	6	18	9	10	(19	(34
Widowed	7	11	17	8	14	20	18		
Never married	4	8	14	7	16	16	14	12	29
Activity status									
Worker	2	5	7	3	11	8	10	10	17
Housewife	2	5	7	3	11	8	8	10	16
Unable to work	9	22	38	8	8	7	6	(	(
Something else	7	10	16	6	18	12	11	(14	(28
Migrant status									
Never lived outside California	4	7	8	5	11	14	18	14	30
Last moved to California									
Before 1946	2	5	9	3	12	7	10	8	15
1946 or after	3	7	9	5	10	9	17	11	33

NA Not applicable.

a Not computed.

Note: The sampling variations for some health insurance and physician visits not computed.

APPENDICES

APPENDIX A

Budget Bureau No. 41-5418; Approval Expires December 31, 1955

CONFIDENTIAL - The information obtained in this survey will be accorded confidential treatment by the U. S. Bureau of the Census, and by the California Department of Public Health for whom the data are being collected. Individual reports will be used for statistical purposes only, and will be seen only by authorized employees of these agencies, who are assigned to work on this project. Only statistical summaries will be published, and individual returns will not be used for purposes of regulation or administration of any program.

Form F-CH-2
(11-30-54)

U. S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
Acting as Collecting Agent for the
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

CALIFORNIA HEALTH SURVEY

LOCATION OF UNIT

1. Type of Dwelling Unit
   - ☐ House, apt., flat
   - ☐ Trailer
   - ☐ Tent, boat, R.R. car
   - ☐ Nondwelling unit

2. Address (If special dwelling place, give name and description of type of place.)

3a. Serial No.

3b. Questionnaire _____ of _____

4. Source of Address
   - ☐ Regular D.U. listing
   - ☐ New construction
   - ☐ Block or segment listing
   - ☐ Special dwelling places
   - ☐ Other *(Specify)*

MAILING RECORD

24. Advance letter ☐ Yes ☐ No

25. Daily Family Health Record ☐ Yes (Pick-up) ☐ No

PROCESSING RECORD

26. PES sample ☐ Yes ☐ No

27. Subsample weight

INTERVIEW RECORD

5. Record of calls to complete interview for:		Date and time of call 1	2	3	4	5
Household	Date:					
	Time:					
Unrelated person	Date:					
	Time:					
Other *(Specify)*	Date:					
	Time:					

6. Reason for non-interview
   - ☐ Entire household not interviewed
   - ☐ Part of household not interviewed: Col. Nos. _____
   - Reason for non-interview:

7. Telephone No. ☐ No telephone

8. Best time to call

9. Name of interviewer (Code): _____

FOLLOW-UP RECORD

10. Record of calls for:		Date and time of call 1	2	3	4	5
Household	Date:					
	Time:					
Unrelated person	Date:					
	Time:					
Other *(Specify)*	Date:					
	Time:					

11. Reason for non-interview
   - ☐ Entire household not interviewed
   - ☐ Part of household not interviewed: Col. Nos. _____
   - Reason for non-interview:

12. Name of interviewer (Code): _____

EDITING RECORD

13. Result ☐ Passed ☐ Failed →	Col. or Table No. (a)	Item or line in Table (b)	Type of error (c)	Information required or other comment (d)
14. Follow-up				
☐ Not necessary			☐ Omitted ☐ Inadequate ☐ Inconsistent	
☐ Telephone			☐ Omitted ☐ Inadequate ☐ Inconsistent	
☐ Personal			☐ Omitted ☐ Inadequate ☐ Inconsistent	
15. Edited			☐ Omitted ☐ Inadequate ☐ Inconsistent	
16. Re-edited			☐ Omitted ☐ Inadequate ☐ Inconsistent	
			☐ Omitted ☐ Inadequate ☐ Inconsistent	

SPECIAL INTERVIEW RECORD

21. Record of calls	1	2	3	4	5
Date					
Time					

22. Reason for non-interview

23. Interviewer

Comm-DC 45763

1. (a) What is the name of the head of this household? (Enter name in first column) **(b) What are the names of all other persons who live here?** (List all persons who usually live here, and all persons staying here who have no usual place of residence elsewhere. List these persons in the prescribed order) **(c) Is there anyone else living here? any babies? any lodgers?** (If "Yes," to any part, add missed person to questionnaire) **(d) Have we missed anyone who is away on business? at school? on vacation? on a visit? temporarily in a hospital?** (If "Yes," to any part, add missed person to questionnaire if person meets definition of household member)	Last name (1) First name and initial	Last name (2) First name and initial
2. How are you related to the head of the household? (Enter relationship to head, for example: head, wife, daughter, grandson, mother-in-law, partner, lodger, lodger's wife, etc.)	Relationship	Relationship
3. Race (Do not ask) (Check one box for each person)	☐ White ☐ Negro ☐ Other	☐ White ☐ Negro ☐ Other
4. Sex (Check one box for each person)	☐ Male ☐ Female	☐ Male ☐ Female
5. How old were you on your last birthday? (If under one year of age, enter month of birth instead of age; e.g., May, June)	Age	Age
6. Are you now married, widowed, divorced, separated or never married? (Check one box for each person. For persons under 14 years, check "Never married.")	☐ Married ☐ Divorced ☐ Widowed ☐ Separated ☐ Never married	☐ Married ☐ Divorced ☐ Widowed ☐ Separated ☐ Never married
7a. What do you usually do? work / keep house / go to school or something else? If "something else," ask: **Are you unable to work, or something else?** (Check one box)	☐ Work ☐ Keep house ☐ Go to school ☐ Something else: ☐ Under school age ☐ Unable to work (long term) ☐ Retired ☐ Other	☐ Work ☐ Keep house ☐ Go to school ☐ Something else: ☐ Under school age ☐ Unable to work (long term) ☐ Retired ☐ Other
7b. What were you doing most of the past 4 weeks - working / keeping house / going to school or something else?	☐ Working ☐ Keeping house ☐ Going to school ☐ Something else	☐ Working ☐ Keeping house ☐ Going to school ☐ Something else
7c. If "something else" in question 7b but not in 7a, ask: Was this because of illness, vacation, or what reason?	Reason	Reason
I Interview each adult person for himself for questions 8-18 and Tables I and II, if he is at home. Enter column number of respondent in each column.	☐ Responded for self Col. No. _____ was respondent	☐ Responded for self Col. No. _____ was respondent
We're interested in all kinds of illness, whether serious or not -- **8. Were you sick at any time in the 4 weeks from Monday --- through last Sunday?** **(a) What was the matter?** **(b) Anything else?**	☐ Yes ☐ No	☐ Yes ☐ No
9. During these 4 weeks did you have any accidents or injuries - big or little - that happened around the house? **(a) What happened?** **(b) Anything else?**	☐ Yes ☐ No	☐ Yes ☐ No
10. What about accidents or injuries away from home? **(a) What happened?** **(b) Anything else?**	☐ Yes ☐ No	☐ Yes ☐ No
11. During these 4 weeks did you feel the effects of an earlier accident or injury? **(a) What were the effects?** **(b) Anything else?**	☐ Yes ☐ No	☐ Yes ☐ No
12. During these 4 weeks did you take any medicine or treatment prescribed by a doctor besides for the ... you have already told me about? **(a) For what condition did you take it?** **(b) Anything else?**	☐ Yes ☐ No	☐ Yes ☐ No
13. Did you take any other medicine or home remedies during these 4 weeks for any (other) condition? **(a) For what condition did you take it?** **(b) Anything else?**	☐ Yes ☐ No	☐ Yes ☐ No
14. Do you have any chronic conditions or ailments? Even though they may not bother you all the time? **(a) What are they?** **(b) Anything else?**	☐ Yes ☐ No	☐ Yes ☐ No
15. Do you have any impairments or handicapping conditions? Even though They may not interfere with your usual activities? **(a) What are they?** **(b) Anything else?**	☐ Yes ☐ No	☐ Yes ☐ No
We're interested in some particular conditions -- **16. Has anyone in the family had any of these conditions during the past 12 months?** (Read Chronic Conditions list to respondent)	☐ Yes ☐ No	☐ Yes ☐ No
I would like to ask about some symptoms -- **17. Has anyone in the family had any of these symptoms during the past 12 months?** (Read Symptoms list to respondent)	☐ Yes ☐ No	☐ Yes ☐ No

Table I-ILLNESSES AND INJURIES Circle "CC" in col. (m) if entry in col. (b) is 14, 15 or 16 or if condition is on Chronic Condition List, or if date in col. (h) is 3 months ago or longer.

					IF DOCTOR WAS SEEN ("YES" IN COL. (c)):			"YES" IN COL. (g)					(Circle "CC" below if condition is chronic; otherwise ask:	"YES" OR "CC" IN COL. (m)								
Line No.	Col. No. of person	Question No.	Was a doctor (ever) seen about it?	What did the doctor say it was? --- did he use any medical terms? (If "No" in col. (c), enter condition; if symptom, enter both symptom and cause. If "effects," enter both effects and cause of injury.) (If accident or injury, enter "Accident" and fill Table A before completing Table I for the accident.) (If impairment, enter both the condition and cause)	When was a doctor LAST seen about...? (Month, day and year. If day not known enter week) (Year only if prior to 1954)	What is the doctor's name and address? (Enter full name and street address, and city or county. Enter State if outside California.)	If from Q8 - 13 check "Yes" If from Q. 14, 15, 16 or 17, ask: Did ... bother you at all during the past 4 weeks? (If "No," skip to col. (m))	When did ... start? or When did ... happen? If day not known ask: In what week did it start?	During the past 4 weeks, how many days did ... keep you in bed either all or part of the day?	How many (other) days did ... keep you from going out of doors?	How many (other) days did ... keep you from your usual activities including week-ends & holidays?	Altogether, that makes --- days. How many of these days: Were you away from work were you away from school did you have to cut down on housework because of...?	Do you have chronic or repeated trouble (with) (because of) ...?	When did you FIRST notice this condition? (Month and year. Year only if prior to 1954) If date same as (h), re-ask (h) for trouble in past 4 weeks.	About how many days in the past 12 months have you stayed in bed because of...?	About how many (other) days altogether in the past 12 months did... keep you from your usual activities?	Were you ever in a hospital overnight or longer because of ...? (Enter "No" or month and year of LAST hospitalization)	How often do you see a doctor for ..., regularly, or just once in a while or not at all?	Do you take medicine or treatments for ..., regularly, or just once in a while or not at all?	Please look at this card and read each statement. Then tell me which statement fits you best (Show proper card)	If 1, 2, 3, or 4 in col. (t): Is this because of any of the conditions you have told me about?	If "Yes" in col. (u): Which? (Enter "X" on line for each condition named)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)
1			☐ Yes ☐ No				☐ Yes ☐ No						No Skip (n)-(v) C-C → Yes →	☐ Birth				☐ Reg ☐ 0 ☐ No	☐ Reg ☐ 0 ☐ No		☐ Yes ☐ No	
2			☐ Yes ☐ No				☐ Yes ☐ No						No Skip (n)-(v) CC → Yes →	☐ Birth				☐ Reg ☐ 0 ☐ No	☐ Reg ☐ 0 ☐ No		☐ Yes ☐ No	
3			☐ Yes ☐ No				☐ Yes ☐ No						No Skip (n)-(v) C-C → Yes →	☐ Birth				☐ Reg ☐ 0 ☐ No	☐ Reg ☐ 0 ☐ No		☐ Yes ☐ No	
4			☐ Yes ☐ No				☐ Yes ☐ No						No Skip (n)-(v) C-C → Yes →	☐ Birth				☐ Reg ☐ 0 ☐ No	☐ Reg ☐ 0 ☐ No		☐ Yes ☐ No	
5			☐ Yes ☐ No				☐ Yes ☐ No						No Skip (n)-(v) C-C → Yes →	☐ Birth				☐ Reg ☐ 0 ☐ No	☐ Reg ☐ 0 ☐ No		☐ Yes ☐ No	

30. Is there anyone in the family who requires constant help or nursing care? Is there anyone in the family who requires help or nursing care only part of the time, such as help in dressing, eating, toilet activities, etc.? (Do not record "Yes" for normal care for infants or children) **(a) For what conditions?** (Add to Table I any new conditions) **(b) How long has he required this care?** (Years; or months if less than 1 year) **(c) Who helps with this care?** (Check all boxes that apply. If "Other" specify in footnotes)	☐ Yes - Constant ☐ No ☐ Yes - Part-time Conditions: ____ Years ____ Months ☐ Household - Col. Nos. ____ ☐ Other relative ☐ Trained (registered) nurse ☐ Practical nurse ☐ Other *(Specify)* ____	☐ Yes - Constant ☐ No ☐ Yes - Part-time Conditions: ____ Years ____ Months ☐ Household - Col. Nos. ____ ☐ Other relative ☐ Trained (registered) nurse ☐ Practical nurse ☐ Other *(Specify)* ____	☐ Yes - Constant ☐ No ☐ Yes - Part-time Conditions: ____ Years ____ Months ☐ Household - Col. Nos. ____ ☐ Other relative ☐ Trained (registered) nurse ☐ Practical nurse ☐ Other *(Specify)* ____	☐ Yes - Constant ☐ No ☐ Yes - Part-time Conditions: ____ Years ____ Months ☐ Household - Col. Nos. ____ ☐ Other relative ☐ Trained (registered) nurse ☐ Practical nurse ☐ Other *(Specify)* ____	☐ Yes - Constant ☐ No ☐ Yes - Part-time Conditions: ____ Years ____ Months ☐ Household - Col. Nos. ____ ☐ Other relative ☐ Trained (registered) nurse ☐ Practical nurse ☐ Other *(Specify)* ____
31. During the past 4 weeks did anyone in the family see a doctor, or consult a doctor by telephone, for any reason at all? (a) Altogether, how many times in the past 4 weeks did you: See a doctor? Consult a doctor by telephone? (1) Where did you see the doctor -- at home, at his office, or what other place? Enter number of visits each place. (The sum of the number of visits by place must be the same as the figure for total visits.) **(b) What was the purpose of the visit (telephone call)?** (Fill one column for each visit or telephone consultation. Enter code for place and check all boxes that apply. If "Other" specify purpose in footnote.)	____ Visits ☐ None ____ 1. Home ____ 2. Dr. office 3. Hosp. clinic ____ 4. Other clinic ____ ____ 5. Other *(Specify)* ____ 6. Telephone consultations ← PLACE CODE ☐☐☐☐ Ill. - Chr. Cond. ( )( )( )( ) Line Nos. - Table I ☐☐☐☐ Sch.-Emp.-Ins. Check ☐☐☐☐ Oth. Gen'l Check ☐☐☐☐ Pre/Post Natal ☐☐☐☐ Immun. - Vacc. ☐☐☐☐ Eye Exam ☐☐☐☐ Other	____ Visits ☐ None ____ 1. Home ____ 2. Dr. office 3. Hosp. clinic ____ 4. Other clinic ____ ____ 5. Other *(Specify)* ____ 6. Telephone consultations ← PLACE CODE ☐☐☐☐ Ill. - Chr. Cond. ( )( )( )( ) Line Nos. - Table I ☐☐☐☐ Sch.-Emp.-Ins. Check ☐☐☐☐ Oth. Gen'l Check ☐☐☐☐ Pre/Post Natal ☐☐☐☐ Immun. - Vacc. ☐☐☐☐ Eye Exam ☐☐☐☐ Other	____ Visits ☐ None ____ 1. Home ____ 2. Dr. office 3. Hosp. clinic ____ 4. Other clinic ____ ____ 5. Other *(Specify)* ____ 6. Telephone consultations ← PLACE CODE ☐☐☐☐ Ill. - Chr. Cond. ( )( )( )( ) Line Nos. - Table I ☐☐☐☐ Sch.-Emp.-Ins. Check ☐☐☐☐ Oth. Gen'l Check ☐☐☐☐ Pre/Post Natal ☐☐☐☐ Immun. - Vacc. ☐☐☐☐ Eye Exam ☐☐☐☐ Other	____ Visits ☐ None ____ 1. Home ____ 2. Dr. office 3. Hosp. clinic ____ 4. Other clinic ____ ____ 5. Other *(Specify)* ____ 6. Telephone consultations ← PLACE CODE ☐☐☐☐ Ill. - Chr. Cond. ( )( )( )( ) Line Nos. - Table I ☐☐☐☐ Sch.-Emp.-Ins. Check ☐☐☐☐ Oth. Gen'l Check ☐☐☐☐ Pre/Post Natal ☐☐☐☐ Immun. - Vacc. ☐☐☐☐ Eye Check ☐☐☐☐ Other	____ Visits ☐ None ____ 1. Home ____ 2. Dr. office 3. Hosp. clinic ____ 4. Other clinic ____ ____ 5. Other *(Specify)* ____ 6. Telephone consultations ← PLACE CODE ☐☐☐☐ Ill. - Chr. Cond. ( )( )( )( ) Line Nos. - Table I ☐☐☐☐ Sch.-Emp.-Ins. Check ☐☐☐☐ Oth. Gen'l Check ☐☐☐☐ Pre/Post Natal ☐☐☐☐ Immun. - Vacc. ☐☐☐☐ Eye Exam ☐☐☐☐ Other

Form F-CH-2 (11-30-54) Comm-DC 45763

Table II - HOSPITALIZATION DURING PAST TWELVE MONTHS

Line No.	Col. No. of person (a)	Question No. (b)	When did you enter the hospital? (Month, Year) (c)	How many days were you in the hospital, not counting the day you left? (d)	How many of these --- days were during the past 12 months (j)	For what conditions did you enter the hospital? (e)	Were any operations performed on you during this stay in the hospital? If "Yes,": (a) What was the operation? (f)	What is the name and address of the hospital you were in? (Enter name, and city or county, and enter State if outside of California.) (g)	How many of these --- days were during the past 4 weeks? (h)	If "1" or more in col. (h) Were these days counted in the --- days you gave me before? (If "No," correct col. (1) of Table I) (i)
1					☐ All ____ days		☐ No		☐ None or ______ days	☐ Yes ☐ No
2					☐ All ____ days		☐ No		☐ None or ______ days	☐ Yes ☐ No

18. During the past 12 months has anyone in the family been a patient in a hospital for over-night or longer?	☐ Yes (Table II) ☐ No	☐ Yes (Table II) ☐ No	☐ Yes (Table II) ☐ No	☐ Yes (Table II) ☐ No	☐ Yes (Table II) ☐ No
19. Did you ever serve for any time at all in the Armed Forces of the United States? If "Yes": (a) When did you serve? (Check all boxes that apply) Korean War: Since June 27, 1950 World War II: September 16, 1940 - July 25, 1947 World War I: April 6, 1917 - November 11, 1918 Spanish American War: April 21, 1898 - July 4, 1902 (For persons under 14 years of age, check "No.")	☐ Yes ☐ No ☐ Korean War ☐ World War II ☐ World War I ☐ Spanish-American War ☐ Other Service	☐ Yes ☐ No ☐ Korean War ☐ World War II ☐ World War I ☐ Spanish-American War ☐ Other Service	☐ Yes ☐ No ☐ Korean War ☐ World War II ☐ World War I ☐ Spanish-American War ☐ Other Service	☐ Yes ☐ No ☐ Korean War ☐ World War II ☐ World War I ☐ Spanish-American War ☐ Other Service	☐ Yes ☐ No ☐ Korean War ☐ World War II ☐ World War I ☐ Spanish-American War ☐ Other Service
PERSONS WORKING Ask for all persons checked "Work" in question 7a, or "Working" in 7b. 20. What kind of work were you doing? (If not working in past 4 weeks, enter last job or business)	Occupation	Occupation	Occupation	Occupation	Occupation
21. In what kind of business or industry was this work done?	Industry	Industry	Industry	Industry	Industry
22. Class of worker	☐ Paid ☐ Govt. ☐ Own ☐ NP	☐ Paid ☐ Govt. ☐ Own ☐ NP	☐ Paid ☐ Govt. ☐ Own ☐ NP	☐ Paid ☐ Govt. ☐ Own ☐ NP	☐ Paid ☐ Govt. ☐ Own ☐ NP
23. If "Paid" or "Gov't." in question 22, ask: Do you receive any pay from your job for time lost when you are sick?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
24. If "Yes" in question 23, ask: Is this full or part pay?	☐ Full ☐ Part	☐ Full ☐ Part	☐ Full ☐ Part	☐ Full ☐ Part	☐ Full ☐ Part
HEALTH INSURANCE 25. Do you have any kind of insurance that pays for sickness or hospitalization or for doctor's care?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
26. If "Yes" in question 25, ask: (a) What kind is it? (b) Does it pay for -- (Read items under part b.)	a. Name ☐ CPS ☐ Blue Cross ☐ Other *(Specify)* b. Pays for: *(Check all that apply)* ☐ Doctor's care? ☐ Hospitalization? ☐ Surgery? ☐ Time away from work? ☐ Anything else? *(Specify)*	a. Name ☐ CPS ☐ Blue Cross ☐ Other *(Specify)* b. Pays for: *(Check all that apply)* ☐ Doctor's care? ☐ Hospitalization? ☐ Surgery? ☐ Time away from work? ☐ Anything else? *(Specify)*	a. Name ☐ CPS ☐ Blue Cross ☐ Other *(Specify)* b. Pays for: *(Check all that apply)* ☐ Doctor's care? ☐ Hospitalization? ☐ Surgery? ☐ Time away from work? ☐ Anything else? *(Specify)*	a. Name ☐ CPS ☐ Blue Cross ☐ Other *(Specify)* b. Pays for: *(Check all that apply)* ☐ Doctor's care? ☐ Hospitalization? ☐ Surgery? ☐ Time away from work? ☐ Anything else? *(Specify)*	a. Name ☐ CPS ☐ Blue Cross ☐ Other *(Specify)* b. Pays for: *(Check all that apply)* ☐ Doctor's care? ☐ Hospitalization? ☐ Surgery? ☐ Time away from work? ☐ Anything else? *(Specify)*
MIGRATION 27. Have you ever lived any place besides California, not counting time away in school or in the Armed Forces?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
28. If "Yes" in question 27, ask: When did you LAST move to California?	Year	Year	Year	Year	Year
32. What is the highest grade you completed in school? (Circle highest grade completed or check "None." Check "None" for persons under 6 years of age.)	1 2 3 4 5 6 7 8 9 10 11 12 College: 1 2 3 4 5 ☐ None	1 2 3 4 5 6 7 8 9 10 11 12 College: 1 2 3 4 5 ☐ None	1 2 3 4 5 6 7 8 9 10 11 12 College: 1 2 3 4 5 ☐ None	1 2 3 4 5 6 7 8 9 10 11 12 College: 1 2 3 4 5 ☐ None	1 2 3 4 5 6 7 8 9 10 11 12 College: 1 2 3 4 5 ☐ None
29. (Show card) We want to classify incomes for all families. In which group does the total income of your family fall for the year 1954?	Group	Group	Group	Group	Group

TABLE A

Line No. from Table I: _____

1. How did the accident happen? (Specify object which inflicted injury, or poisoning agent.)

2. In what way were you hurt? What part of the body was hurt? (Specify type of injury and part of body affected.)

3. Where did it happen?

Away from any house

- ☐ Street, sidewalk or highway
- ☐ Farm
- ☐ Mine or quarry
- ☐ Industrial place or premises
- ☐ Place for recreation or sport
- ☐ Public building or place of entertainment
- ☐ Other *(Specify)*

_____

Inside a house or on adjacent premises

a. Location:

- ☐ Room *(Specify)* _____
- ☐ On steps or stairway in house
- ☐ Other location inside house *(Specify)* _____
- ☐ Yard
- ☐ Garage
- ☐ Outside steps or stairway
- ☐ Street or sidewalk
- ☐ Hotel rooms (*not* lobbies, halls, etc.)
- ☐ Other area adjoining house *(Specify)* _____

b. Did this happen at your own home or someone else's home?

- ☐ Own home
- ☐ Other home

TABLE A

Line No. from Table I: _____

1. How did the accident happen? (Specify object which inflicted injury, or poisoning agent.)

2. In what way were you hurt? What part of the body was hurt? (Specify type of injury and part of body affected.)

3. Where did it happen?

Away from any house

- ☐ Street, sidewalk or highway
- ☐ Farm
- ☐ Mine or quarry
- ☐ Industrial place or premises
- ☐ Place for recreation or sport
- ☐ Public building or place of entertainment
- ☐ Other *(Specify)*

_____

Inside a house or on adjacent premises

a. Location:

- ☐ Room *(Specify)* _____
- ☐ On steps or stairway in house
- ☐ Other location inside house *(Specify)* _____
- ☐ Yard
- ☐ Garage
- ☐ Outside steps or stairway
- ☐ Street or sidewalk
- ☐ Hotel rooms (*not* lobbies, halls, etc.)
- ☐ Other area adjoining house *(Specify)* _____

b. Did this happen at your own home or someone else's home?

- ☐ Own home
- ☐ Other home

Footnotes

Card A

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
Acting as Collecting Agent for the
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

CALIFORNIA HEALTH SURVEY

Chronic Conditions

1. Hay fever
2. Asthma
*3. Chronic skin trouble
*4. Any allergy
5. Chronic bronchitis
6. Hardening of arteries
7. High blood pressure
*8. Heart trouble
9. Rheumatic fever
10. Arthritis or rheumatism
11. Varicose veins
12. Anemia
13. Stomach ulcer
*14. Liver trouble
*15. Gall bladder trouble
*16. Kidney trouble
17. Hemorrhoids or piles
18. Neuritis
19. Cerebral palsy
20. Polio
21. Other paralysis
22. Epilepsy
*23. Convulsions or spasms
24. Migraine
*25. Tumor
26. Diabetes
27. Chronic sinus trouble
28. Tuberculosis
29. Hernia or rupture
30. Blindness
31. Deafness
32. Stammering or stuttering
33. Missing arm or leg
*34. Handicap or defect present since birth
*35. Any other chronic condition

*Conditions marked (*) are not adequate as entries in col. (d) of Table I. Specify the type of trouble, or "Type DK" if type is unknown.

Comm-DC-44020

Card A
(Spanish)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
Acting as Collecting Agent for the
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

CALIFORNIA HEALTH SURVEY

Chronic Conditions

1. Hay fever
2. Asma
* 3. Enfermedades del cutis? granos? granos entierrados? empeines? sarna? otros?
* 4. Alergia
5. Bronquitis
7. High blood pressure
* 8. Enfermedades del corazon
9. Fiebre reumatica
10. Artritis? Reumas? Reumatismo?
11. Varicose veins
12. Anemia
13. Ulceras del estomago
*14. Enfermedades del higado
*15. Vesicula biliar
*16. Enfermedades de los renones
17. Almorranas
18. Neuritis
19. Defectos del sistema nervioso
20. Paralisis infantil (polio)
*21. Otros paralisis o aire
22. Epilepsia
*23. Convulsiones
24. Jaqueca
*25. Tumor
26. Diabetes
27. Chronic sinus trouble
28. Tuberculosis
29. Herniado? quebrado?
30. Ciego
31. Sordo
32. Tartamudo
33. Manco? cojo?
*34. Otro impedimento o enfermedad presente desde infancia
*35. Otra condicion cronica

*Conditions marked (*) are not adequate as entries in col. (d) of Table I. Specify the type of trouble, or "Type DK" if type is unknown.

Comm-DC-44020

Card B

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
Acting as Collecting Agent for the
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

CALIFORNIA HEALTH SURVEY

Symptoms

1. Abscessed or running ear
2. Many long-lasting or serious headaches
3. Skin rash, itching or breaking out
4. Lumps or discolored patches on the skin
5. Long-lasting pains in the chest
6. Long-lasting cough
7. Shortness of breath
8. Frequent backaches
9. Symptoms of overweight that cause trouble
10. Long-lasting pains or swelling in the joints
11. Swelling of ankles
12. Frequent diarrhea or constipation
13. Abnormal bleeding from any part of the body

Comm-DC-44020

Card C

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
Acting as Collecting Agent for the
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

CALIFORNIA HEALTH SURVEY

For: Person other than Housewife or Child

1. **Cannot get around without help**
   (for example, confined to bed, confined to wheelchair, needs help of another person, etc.)

2. **Can get around without help, but cannot work.**

3. **Can work, but have had to cut down on amount or change kind of work.**

4. **Can work, but have had to cut down on other activities**
   (for example, sports, hobbies, visiting, church, clubs, etc.)

5. **Activities not affected in any special way.**

Card D

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
Acting as Collecting Agent for the
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

CALIFORNIA HEALTH SURVEY

For: Housewife

1. **Cannot get around without help**
   (for example, confined to bed, confined to wheelchair, needs help of another person, etc.)

2. **Can get around without help, but cannot keep house.**

3. **Can keep house, but have had to cut down on amount or kind of housekeeping.**

4. **Can keep house, but have had to cut down on other activities**
   (for example, handiwork, visiting, church, clubs, etc.)

5. **Activities not affected in any special way.**

Card E

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
Acting as Collecting Agent for the
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

CALIFORNIA HEALTH SURVEY

For: Child

1. **Cannot get around without help**
   (for example, confined to bed, confined to wheelchair, needs help of another person, etc.)

2. **Can get around without help, but cannot go to school**
   (for children under six, could not go if old enough)

3. **Can go to school but is limited in other activities**
   (for example, limited in amount of play time, or needs special rest periods or special diet)

4. **Can go to school, but cannot take part in athletics, or uses special transportation, crutches or braces.**

5. **Activities not affected in any special way.**

Comm-DC-44020

APPENDIX B

DEFINITIONS OF TERMS

DEMOGRAPHIC CHARACTERISTICS

ITEM AND CLASSIFICATION	SOURCE OF RESPONSE	INSTRUCTIONS TO INTERVIEWER	EXPLANATION
RACE			
White (excluding Spanish Surname) Spanish Surname Negro Other	Observation of Interviewer.	Assume race of related persons... is same as race of respondent. (In case of servants or hired hands... inquire specifically...)	SPANISH SURNAME - See U.S. Bureau of the Census, U.S. Census of Population: 1950, Vol. IV, Special Reports, Part 3, Ch. C. Persons of Spanish Surnames, U.S. Government Printing Office, Washington, D.C., 1953, p. 3c-4ff.
MARITAL STATUS			
Married Widowed } also classified as unmarried Divorced } also classified as unmarried Separated } also classified as unmarried Never married	6. Are you now married, widowed, divorced, separated or never married? (Check one box for each person. For persons under 14 years, check 'Never married'.)	...asked only of persons 14 years of age and over. Include "annulled" under "divorced".	UNMARRIED - includes widowed, divorced and separated.
ACTIVITY STATUS			
Worker	7. What were you doing most of the past 4 weeks - working, keeping house, going to school or something else? (Check one box for each person.) If 'something else', ask: Are you unable to work, or something else?	In asking question insert the most "likely" activity and then add "or something else". Children under 5 check box "something else". More than one activity check activity at which person spends "most time". If "something else" ask person 14 years and over "unable to work" or "something else".	WORKER - excludes "Work around the house and volunteer or unpaid work such as Church, Red Cross, etc.
White Collar Blue Collar			WHITE COLLAR } See occupation BLUE COLLAR } for inclusions
Housewife			
Student			STUDENT - Attendance at regular school or college. Nursery school attendance not counted.
Unable to work } also classified as other Something else } also classified as other			UNABLE TO WORK - must be a definite illness or disability of long duration. If short duration enter under usual activity before illness. SOMETHING ELSE - includes retired, preschool, etc.
GEOGRAPHIC AREA			
Metropolitan	Address of Household.		
Los Angeles			Los Angeles and Orange Counties.
San Francisco Bay Area			Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma Counties.
San Diego			San Diego.
Remainder of State			
North Coast and Mountain			Del Norte, Humboldt, Lake, Mendocino, Alpine, Amador, Calaveras, El Dorado, Inyo, Lassen, Mariposa, Modoc, Mono, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Trinity and Tuolumne Counties.
Sacramento, San Joaquin Valleys			Butte, Colusa, Glenn, Sacramento, Sutter, Tehama, Yolo, Yuba, Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare Counties.
Central Coast, Santa Barbara-Ventura			Monterey, San Benito, San Luis Obispo, Santa Cruz, Santa Barbara and Ventura Counties.
Southeast			Imperial, Riverside and San Bernardino Counties.

ITEM AND CLASSIFICATION	SOURCE OF RESPONSE	INSTRUCTIONS TO INTERVIEWER	EXPLANATION
HEALTH INSURANCE COVERAGE No Health Insurance Some Health Insurance	25. Do you have any kind of insurance that pays for sickness or hospitalization or for doctor's care? 26. If 'Yes' check in question 25, ask: (b) What does it pay for? (b) Pays for: (Check all that apply) Doctor's care Hospitalization Surgery Time away from work Other (Specify)		All other answers not meeting qualifications of "Some Health Insurance". Health insurance paying for Doctor's care, Hospitalization or Surgery.
VETERAN STATUS Veteran Non-Veteran	19. Ask only for persons 14 years and over -- Did you ever serve in the Armed Forces of the United States?	Service in the Armed Forces---Active duty...in the U.S. Army, Navy, Air Force, Marine Corps, Coast Guard or any reserve branch of this organization.	VETERAN - Does not include service in Merchant Marine, civilian employee of Department of National Defense, etc.
FAMILY INCOME Less than $2,000 $2,000 - $4,999 $5,000 and over	29. We want to classify incomes for all families. (Show card) In which group does the total income for your family fall for the year 1953?	Be sure respondent understands that question excludes members not related to head.	Card is broken down into $1,000 groups up to $7,000 and over.
MIGRANT STATUS Never lived outside California Last moved to California Before 1946 1946 and after	27. Have you ever lived any place besides California, not counting time away in school or in the Armed Forces? 28. If 'Yes' in question 27, ask: When did you LAST move to California?	The year entered...should be the year in which the current period of residence started.	
OCCUPATION WHITE COLLAR Professional, Technical, etc. Farmers and Farm Managers Managers, Officials and Proprietors (except farm) Clerical and Kindred Workers Sales Workers BLUE COLLAR Craftsmen, Foremen and Kindred Workers Private Household Workers Service Workers, except private household Farm Laborers and Foremen Laborers except Farm and Mine	PERSONS WORKING For those checked in question 7 as 'Working' or as 'Something Else', if they have a job or business, ask: 20. What kind of work were you doing? (If more than one job, enter job worked at longest.)		Three digit codes, see pp. IX ff of 1950 Census of Population, Classified Index of Occupations and Industries, Bureau of Census, Washington, 1950.
SICK LEAVE Not eligible for sick leave Eligible for sick leave No sick leave Some sick leave Part-time Full-time	22. Class of work (Do not ask) ☐ Paid ☐ Govt. ☐ Own ☐ NP 23. For 'Paid' or 'Govt.' in question 22, ask: Do you receive any pay from your job for time lost when you are sick? 24. If 'Yes' in question 23, ask: Is this full or part pay?		Class of worker is "own" or "NP" (non-paid family worker). Class of worker is "Paid" or "Govt".

APPENDIX C

MEASURES USED

Incidence

12-MONTH INCIDENCE RATES (FOR ILLNESSES AND FOR HOSPITAL ADMISSIONS)

$$\text{ILLNESS RATE} = \frac{\text{Illnesses which started during four weeks preceding interview}}{\text{Population}} \times 1{,}000 \times 13$$

NOTE: There were 13 four-week periods during year.

$$\text{EXAMPLE:} \quad \frac{\text{Number of acute respiratory illnesses starting in four weeks preceding interview for females 15-44 years old}}{\text{Number of females 15-44 years}} \times 1{,}000 \times 13 = 1{,}254$$

INTERPRETATION: During one year, for every 1,000 females aged 15-44, 1,254 cases of acute respiratory illnesses began.

$$\text{HOSPITAL ADMISSION RATE} = \frac{\text{Number of hospital admissions during 12 months preceding interview}}{\text{Population}} \times 1{,}000$$

$$\text{EXAMPLE:} \quad \frac{\text{Number of hospital admissions during 12 months preceding interview for persons aged 45-64 years}}{\text{Number of persons aged 45-64 years}} \times 1{,}000 = 98$$

INTERPRETATION: During one year there was an average of 98 hospital admissions for every 1,000 persons aged 45-64 years.

Prevalence

NOTE: In each instance in the monograph by prevalence is meant *period* prevalence rates. (For definition and discussion see "Measures of Morbidity, Studies on Medical and Population Subjects," No. 8, HMSO, 1954.)

4-WEEK PREVALENCE OF ILL PERSONS

$$\text{PERSON RATE} = \frac{\text{Persons with illnesses existing during four weeks preceding interview}}{\text{Population}} \times 1{,}000$$

$$\text{EXAMPLE:} \quad \frac{\text{Number of males aged 0-14 years with acute illnesses only existing during four weeks preceding interview}}{\text{Number of males aged 0-14 years}} \times 1{,}000 = 208$$

INTERPRETATION: At some time during an average 28-day period, 208 of every 1,000 males 0-14 years old experienced acute illnesses only.

12-MONTH PERIOD PREVALENCE RATES (CHRONIC CONDITIONS, PERSONS WITH CHRONIC CONDITIONS)

$$\text{CHRONIC CONDITION RATE} = \frac{\text{Number of chronic conditions during 12 months preceding interview}}{\text{Population}} \times 1{,}000$$

$$\text{EXAMPLE:} \quad \frac{\text{Number of chronic conditions which caused one or more days of disability in 12 months preceding interview for females aged 15-44 years}}{\text{Number of females aged 15-44 years}} \times 1{,}000 = 286$$

INTERPRETATION: During one year, there was an average of 286 chronic conditions severe enough to cause one or more days of disability for every 1,000 females aged 15-44 years.

$$\text{PERSONS WITH CHRONIC CONDITIONS RATE} = \frac{\text{Number of person with chronic conditions in 12 months preceding interview}}{\text{Population}} \times 1{,}000$$

$$\text{EXAMPLE:} \quad \frac{\text{Number of females aged 15-44 years with chronic conditions which caused one or more days of disability in 12 months preceding interview}}{\text{Number of females aged 15-44 years}} \times 1{,}000 = 212$$

INTERPRETATION: During one year 212 of every 1,000 females aged 15-44 years experienced chronic conditions severe enough to cause one or more days of disability.

Days of Disability

12-MONTH RATES OF DAYS OF DISABILITY (FOR HOSPITALIZATIONS AND ILLNESSES)

$$\text{HOSPITALIZATION DAYS RATE} = \frac{\text{Number of days in hospital in 12 months preceding interview}}{\text{Population}} \times 1{,}000$$

$$\text{EXAMPLE:} \quad \frac{\text{Number of days hospitalized in 12 months preceding interview for females aged 45-64 years}}{\text{Number of females aged 45-64 years}} \times 1{,}000 = 862$$

INTERPRETATION: During one year there was an average of 862 days spent in hospitals for every 1,000 females aged 45-64 years.

$$\text{ILLNESS DAYS RATE} = \frac{\text{Number of days disabled for a given type of illness in the four weeks preceding interview}}{\text{Population}} \times 13$$

NOTE: There are 13 four-week periods during a year.

$$\text{EXAMPLE:} \quad \frac{\text{Number of days disabled for acute illnesses in four weeks preceding interview for females aged 45-64 years}}{\text{Number of females aged 45-64 years}} \times 13 = 6.68$$

INTERPRETATION: During one year there was an average of 6.68 days of disability because of acute illness for every female aged 45-64 years.

Physician Visits

$$\text{PHYSICIAN VISIT RATE} = \frac{\text{Number of physician visits in four weeks preceding interview}}{\text{Population}} \times 13$$

$$\text{EXAMPLE:} \quad \frac{\text{Number of physician visits for males aged 15-44 years in four weeks preceding interview}}{\text{Number of males aged 15-44 years}} \times 13 = 4.5$$

INTERPRETATION: During one year there was an average of 4.5 physician visits for every male aged 15-44 years.

Home Nursing Care

$$\text{HOME NURSING CARE RATE} = \frac{\text{Number of persons receiving home nursing care at time of interview}}{\text{Population}} \times 1{,}000$$

$$\text{EXAMPLE:} \quad \frac{\text{Number of persons under 65 years old receiving home nursing care at time of interview}}{\text{Number of persons under 65 years old}} \times 1{,}000 = 5$$

INTERPRETATION: For every 1,000 persons under 65 years old there was an average of five persons receiving home nursing care at the time of interview.

METHOD OF ROUNDING ESTIMATES

Following are examples of the procedures in rounding rates and percents shown in this monograph.

It is necessary to calculate figures to two more places than are to be used in the final figures.

If the first and second figures after the last significant figure desired are:

1. *less than 50*, the numbers after the last significant figure are dropped.

   Example: 29.148 = 29.1

2. *more than 50*, the last significant figure is raised.

   Example: 30.254 = 30.3

3. *50*, the procedure is as follows:

   (a) If the last significant figure is an *odd* number, it is raised.

   Example: 22.350 = 22.4

   (b) If the last significant figure is an *even* number or zero, the 5 is dropped.

   Example: 22.250 = 22.2
   22.050 = 22.0

   (c) When the whole number is zero followed by .050 it is raised.

   Example: 0.050 = 0.1

APPENDIX D

Detailed Diagnostic List

Group Code	Diagnosis	ISC Code Numbers
Infectious and Parasitic		
01	Active tuberculosis	0010-0080, 0100-0123, 0140-0192
02	Arrested tuberculosis and late effects	0090, 0130-0133
03	Common childhood diseases	0560, 0850, 0860, 0870, 0890
04	Other	0200-0470, 0500-0550, 0570-0803, 0820, 0840, 0880, 0900-0968, 1000-1303, 1320-1381
Respiratory		
10	Common cold and other acute upper resp.	4700-4750, 4810, 5121, 7833
11	Bronchitis and chest cold	5000-5021
12	Pneumonia	4900-4930, 0561, 0851, 4800
13	Chronic tonsillitis and sore throat	5100, 5101, 5120
14	Chronic sinusitis	5130
15	Other	0969, 5110, 5140-5272
Acute Gastro-Intestinal		
20	Dysentery and diarrhea	0480, 7856, 5710
21	Acute indigestion	5442, 7841
22	Intestinal flu	4820
23	Other	0490-0492, 5430, 5711, 7855
Other Gastro-Intestinal Conditions		
24	Ulcers, stomach and duodenum	5400-5411
25	Hernias	5600-5615
26	Diseases of gallbladder	5840-5860
27	Diseases of liver	5800-5830
28	Dental problems	5300-5350
29	Gastro-intestinal symptoms due to nerves	3160-3163
2X	Constipation	5730
2R	Other	5420, 5421, 5440, 5441, 5450, 5500-5530, 5700-5705, 5720-5723, 5731-5780, 5360-5391, 5870-5872
Cardiovascular		
30	Rheumatic fever	4000-4021
31	Rheumatic heart disease	4100-4160
32	Arteriosclerotic heart dis. incl. coronary dis. with or without hyper.	4200-4202
33	Hypertensive heart dis. without coronary or arteriosclerotic heart disease	4400-4430
34	General arteriosclerosis	4500, 4501
35	Hypertension without heart involvement	4440-4470
36	Other heart conditions	4210-4343, 7824
37	Vascular lesions affecting central nervous system	3300-3340
38	Varicose veins	4600
39	Hemorrhoids	4610
3X	Hypotension	4670
3R	Other conditions of lymph and circ. sys.	4620-4660, 4671-4683, 4510-4560
Other Conditions Specifically Defined		
Genito-Urinary		
40	Nephritis and nephrosis	5900-5940
41	Other diseases of kidney	6000-6002, 6030
42	Other diseases of genito-urinary system	6010-6020, 6040-6090, 7920
43	Disorders of menstruation	6340, 6341[a]
44	Menopausal symptoms	6350
45	Diseases and disorders of breast and female genital organs	6200-6260, 6300-6330, 6360-6371
46	Diseases of male genital organs	6100-6170
Childbirth		
50	Delivery, with or without complications	6600-6607, 6700-6780
51	Disorders of pregnancy and puerperium	6400-6523, 6800-6890
52	Birth (child's code)	6610, 6620
53	Diseases of infancy	7600-7699, 7700-7760, 7790
Diseases of Muscle, Bone, and Joint		
55	Arthritis and rheumatism	7200-7270
56	Back conditions	7350, 7360
57	Other muscle, bone and joint involvement	7300-7340, 7370-7379, 738X, 7400, 741X, 742X, 7430-7480, 749X.
Neoplasms		
60	Malignant	1400-2050
61	Benign	2100-2290
62	Unspecified	2300-2390
Other Specified Diseases		
70	Blindness both eyes	3890,3891,3895
71	Blindness one eye and other impairing diseases of the eye	3892-3894, 3850, 3860, 3870, 3810, 3820
72	Other eye conditions	3700-3790, 3800, 3830, 3840, 3880
73	Deafness and deafmutism	3970-3983
74	Other diseases of ear and mastoid	3900-3960
75	Epilepsy	3530-3533
76	Cerebral palsy	3510
77	Late effects of polio	081X
78	Absence or amputation of member	26XX - 3rd and 4th digit showing site
79	Diseases of central nervous system affecting motion	3500,352X,3550-3570, 0830
80	Anemia NEC	2930
81	Other diseases of blood forming organs	2900-2927, 2940-2990
82	Glandular problems	2500-2540, 2700-2770
83	Diabetes	2600
84	Inflammatory diseases of central nervous system	3400-3450
85	Neuritis, neuralgia, etc.	3600-3690
86	Vitamin deficiency	2861-2866
87	Congenital malformations	7500-7593
88	Skin affections and diseases	6900-7160, 1310, 7882
89	Unspecified results of old accidents	800-999 with 9 as a 4th digit
90	Migraine and headache	3540, 7910
91	Mental disturbances	3000-3152, 3170-3255, 0831, 0832, 3263, 3264, 7808
92	Asthma and hayfever	2400,2410
93	Other allergies	2420-2450
94	Stammering, stuttering and other speech disturbances	3260-3262, 7815, 7816
95	Overweight	2870
99	Other	0833, 2800-2860, 2880-2892, 4830
Symptoms		
X0	Referable to cardiovascular and nervous system	7800, 7807, 7809-7814, 7817-7819, 7820-7823, 7825-7829
X1	Referable to respiratory, gastro-intestinal and genito-urinary systems	7830-7832, 7834-7837, 7840, 7842-7854, 7857-7867
X2	Other and ill defined symptoms	7870-7881, 7883-7902, 7930-7955
Accidents [1]		
N CODE (where 4th digit is 0)		
R0	Fractures and dislocations	800-839
R1	Sprains and strains	840-848
R2	Lacerations and open wounds (except head)	870-908
R3	Superficial injuries and contusions	910-929
R4	Burns	940-949
R5	All other	850-869, 930-936, 950-999
	Where N code is 0 in 4th digit	
Underlying Cause - E code - (For 100 group Diagnosis only)		
R6	Transport	(E800-E866)
	Non-transport	
R7	Home	E870-E959 - 4th digit coded 0
R8	Occupational	E870-E959 - 4th digit coded 1, 2 or 3
R9	All other	E870-E959 - 4th digit coded 4-9

Note: X under ISC codes - 4th digit anatomic site.

[a] Code 6341 added for menstrual difficulties not already listed.

[1] Current accidents will be duplicated and first group will be coded by Present Concern (N code - R0 - R5). Second group will be coded by Underlying Cause (E - code - R6 - R9).

Ten Group Diagnostic List

Group Code	Diagnosis	ISC Code Numbers
Acute Illnesses		
10-15	Respiratory	4700-4810, 4900-5272, 0561, 0851, 0969, 7833
20-23	Gastro-Intestinal	0480, 0490-0492, 4820, 5430, 5442, 5710, 5711, 7841, 7855, 7856
01-04	Other Communicable	0010-1381 (Omitting 0480, 0490-0492, 0561, 0810-0819, 0830-0833, 0851, 0969, 1310)
R0-R5	Accidents	8000-9650
Residual	All Others	All codes not listed above which were acute illnesses
Chronic Illnesses		
30-37, 3R	Cardiovascular	3300-3340, 4000-4683 (Omitting 4600, 4610, 4670), 7824
10-15	Respiratory	4700-4810, 4900-5272, 0561, 0851, 0969, 7833
55	Arthritis and Rheumatism	7200-7270
56-57, 79	Other Neuro-muscular and Bone Diseases	7300-7499, 3500-3570 (Omitting 3540) 0810-0819, 0830
Residual	All Others	All codes not listed above which were chronic illnesses

Table 1

SURVEY POPULATION BY AGE, SEX AND RACE, MARITAL STATUS, ACTIVITY STATUS
GEOGRAPHIC AREA, HEALTH INSURANCE COVERAGE, FAMILY INCOME AND MIGRANT STATUS

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	TOTAL	RACE				MARITAL STATUS					ACTIVITY STATUS							
											Worker							
		White and Unknown (Excluding Spanish Surname)	Spanish Surname	Negro	Other	Married	Widowed	Divorced, Annulled, Separated	Never Married	Miscel-laneous	Total	White Collar	Blue Collar	Housewife	Student	Unable to Work	Something Else	Miscel-laneous
Total, All Ages	31,831	27,406	2,154	1,726	545	16,037	1,676	1,334	12,723	(61)	11,892	5,855	6,037	6,997	5,644	555	6,650	(93)
Male	15,511	13,313	1,091	830	277	7,990	344	509	6,642	(26)	8,321	3,501	4,820	-	2,943	392	3,802	(53)
Female	16,320	14,093	1,063	896	268	8,047	1,332	825	6,081	(35)	3,571	2,354	1,217	6,997	2,701	163	2,848	(40)
0-14 Years, Total	9,220	7,583	844	621	172	-	-	-	9,209	(11)	-	-	-	-	4,324	-	4,849	(47)
Male	4,745	3,871	454	336	(84)	-	-	-	4,739	(6)	-	-	-	-	2,249	-	2,472	(24)
Female	4,475	3,712	390	285	(88)	-	-	-	4,470	(5)	-	-	-	-	2,075	-	2,377	(23)
15-44 Years, Total	13,324	11,327	939	814	244	9,491	151	700	2,959	(23)	7,432	3,587	3,845	3,917	1,320	(95)	547	(13)
Male	6,246	5,340	439	359	108	4,376	(27)	232	1,599	(12)	5,122	2,038	3,084	-	694	(69)	351	(10)
Female	7,078	5,987	500	455	136	5,115	124	468	1,360	(11)	2,310	1,549	761	3,917	626	(26)	196	(3)
45-64 Years, Total	6,630	5,996	299	232	103	5,179	595	488	359	(9)	3,979	2,016	1,963	2,080	-	210	347	(14)
Male	3,256	2,908	166	113	(69)	2,761	(97)	194	202	(2)	2,836	1,278	1,558	-	-	162	251	(7)
Female	3,374	3,088	133	119	(34)	2,418	498	294	157	(7)	1,143	738	405	2,080	-	(48)	(96)	(7)
65 Years and Over, Total	2,624	2,469	(72)	(57)	(26)	1,348	922	143	193	(18)	460	239	221	990	-	250	905	(19)
Male	1,254	1,185	(32)	(21)	(16)	846	220	(81)	101	(6)	353	180	173	-	-	161	728	(12)
Female	1,370	1,284	(40)	(36)	(10)	502	702	(62)	(92)	(12)	107	(59)	(48)	990	-	(89)	177	(7)

AGE AND SEX	GEOGRAPHIC AREA									HEALTH INSURANCE COVERAGE		FAMILY INCOME				MIGRANT STATUS			
	Metropolitan				Remainder of State												Last Moved to California		
	Total	Los Angeles	San Francisco Bay Area	San Diego	Total	North Coast and Mountain	San Joaquin and Sacramento Valleys	Central Coast and Santa Barbara-Ventura	Southeast	None	Some	Less Than $2,000	$2,000-4,999	$5,000 and Over	Miscel-laneous	Never Lived Outside California	Before 1946	1946 and After	Miscel-laneous
Total, All Ages	23,498	13,357	8,501	1,640	8,333	946	4,564	1,228	1,595	15,203	16,628	3,873	13,040	13,578	1,340	11,630	11,438	8,646	117
Male	11,302	6,477	4,067	758	4,209	475	2,318	616	800	7,263	8,248	1,656	6,407	6,818	630	5,752	5,474	4,215	(70)
Female	12,196	6,880	4,434	882	4,124	471	2,246	612	795	7,940	8,380	2,217	6,633	6,760	710	5,878	5,964	4,431	(47)
0-14 Years, Total	6,615	3,653	2,479	483	2,605	258	1,515	340	492	4,505	4,715	749	4,114	4,055	302	6,682	435	2,078	(25)
Male	3,408	1,969	1,215	224	1,337	133	786	175	243	2,328	2,417	386	2,154	2,059	146	3,393	226	1,110	(16)
Female	3,207	1,684	1,264	259	1,268	125	729	165	249	2,177	2,298	363	1,960	1,996	156	3,289	209	968	(9)
15-44 Years, Total	10,023	5,657	3,615	751	3,301	376	1,823	456	646	5,747	7,577	1,160	5,529	6,177	458	3,697	4,706	4,883	(38)
Male	4,633	2,635	1,659	339	1,613	176	870	240	327	2,655	3,591	467	2,570	3,002	207	1,759	2,150	2,313	(24)
Female	5,390	3,022	1,956	412	1,688	200	953	216	319	3,092	3,986	693	2,959	3,175	251	1,938	2,556	2,570	(14)
45-64 Years, Total	4,916	2,882	1,756	278	1,714	212	884	298	320	2,979	3,651	835	2,556	2,858	381	968	4,345	1,283	(34)
Male	2,379	1,355	889	135	877	118	468	143	148	1,378	1,878	305	1,265	1,508	178	472	2,144	619	(21)
Female	2,537	1,527	867	143	837	(94)	416	155	172	1,601	1,773	530	1,291	1,350	203	496	2,201	664	(13)
65 Years and Over, Total	1,914	1,148	639	127	710	100	340	133	137	1,959	665	1,124	831	475	194	277	1,931	397	(19)
Male	873	514	299	(60)	381	(48)	193	(58)	(82)	900	354	498	415	245	(96)	127	946	173	(8)
Female	1,041	634	340	(67)	329	(52)	147	(75)	(55)	1,059	311	626	416	230	(98)	150	985	224	(11)

Note: For the interview period May 1954 - April 1955.
See "definitions of terms".
Underlined figures represent between 100-499 persons in sample, and rates based on these figures will be underlined.
Figures in parentheses represent less than 100 persons in sample, and rates based on these figures will be parenthesized.

Table 2

PERCENT OF POPULATION BY AGE, SEX AND RACE, MARITAL STATUS, ACTIVITY STATUS, GEOGRAPHIC AREA, HEALTH INSURANCE COVERAGE, MIGRANT STATUS

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	TOTAL	RACE				MARITAL STATUS				ACTIVITY STATUS						
		White (Excluding Spanish Surname)	Spanish Surname	Negro	Other	Married	Widowed	Divorced, Separated, or Annulled	Never Married	Worker			Housewife	Student	Unable to Work	Something Else
										Total	White Collar	Blue Collar				
Total, All Ages	100.0	86.1	6.8	5.4	1.7	50.4	5.4	4.2	40.0	37.4	18.4	19.0	22.0	17.8	2.1	17.5
Total, All Ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male	48.7	48.6	50.6	48.1	50.8	49.8	20.6	38.2	52.2	70.0	59.8	79.8	-	52.1	70.7	57.2
Female	51.3	51.4	49.4	51.9	49.2	50.2	79.4	61.8	47.8	30.0	40.2	20.2	100.0	47.9	29.3	42.8
0-14 Years, Total	29.0	27.7	39.2	36.0	31.6	-	-	-	72.4	-	-	-	-	76.5	-	72.9
Male	14.9	14.1	21.1	19.5	15.4	-	-	-	37.2	-	-	-	-	39.8	-	37.2
Female	14.1	13.5	18.1	16.5	16.1	-	-	-	35.1	-	-	-	-	36.7	-	35.7
15-44 Years, Total	41.9	41.3	43.6	47.2	44.8	59.2	9.0	52.4	23.3	62.4	61.1	63.6	55.9	23.3	17.1	8.2
Male	19.6	19.5	20.4	20.8	19.8	27.3	1.6	17.4	12.6	43.0	34.7	51.0	-	12.3	12.4	5.3
Female	22.2	21.8	23.2	26.4	25.0	31.9	7.4	35.0	10.7	19.4	26.4	12.6	55.9	11.1	4.7	2.9
45-64 Years, Total	20.8	21.9	13.9	13.4	18.9	32.3	35.5	36.5	2.8	33.4	34.4	32.5	29.7	-	37.8	5.2
Male	10.2	10.6	7.7	6.5	12.7	17.2	5.8	14.5	1.6	23.8	21.8	25.8	-	-	29.1	3.8
Female	10.6	11.3	6.2	6.9	6.2	15.0	29.7	22.0	1.2	9.6	12.6	6.7	29.7	-	8.6	1.4
65 Years and Over, Total	8.2	9.0	3.3	3.3	4.8	8.4	55.0	10.7	1.5	3.9	4.1	3.7	14.1	-	45.0	13.6
Male	3.9	4.3	1.5	1.2	2.9	5.3	13.1	6.1	0.8	3.0	3.1	2.9	-	-	29.0	10.9
Female	4.3	4.7	1.9	2.1	1.8	3.1	41.9	4.6	0.7	0.9	1.0	0.8	14.1	-	16.0	2.7

AGE AND SEX	GEOGRAPHIC AREA									HEALTH INSURANCE COVERAGE		FAMILY INCOME			MIGRANT STATUS		
	Metropolitan				Remainder of State										Never Lived Outside Calif.	Last Moved To California	
	Total	Los Angeles	San Francisco Bay Area	San Diego	Total	North Coast and Mountain	San Joaquin and Sacramento Valleys	Central Coast and Santa Barbara-Ventura	South-east	None	Some	Less Than $2,000	$2,000-4,999	$5,000 and Over		Before 1946	1946 and After
Total, All Ages	73.8	42.0	26.7	5.2	26.1	3.0	14.3	3.9	5.0	47.8	52.2	12.2	41.0	42.7	36.5	35.9	27.1
Total, All Ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male	48.1	48.5	47.8	46.2	50.5	50.2	50.8	50.2	50.2	47.8	49.6	42.8	49.1	50.2	49.5	47.9	48.8
Female	51.9	51.5	52.2	53.8	49.5	49.8	49.2	49.8	49.8	52.2	50.4	57.2	50.9	49.8	50.5	52.1	51.2
0-14 Years, Total	28.2	27.3	29.2	29.5	31.3	27.3	33.2	27.7	30.8	29.6	28.3	19.3	31.5	29.9	57.4	3.8	24.0
Male	14.5	14.7	14.9	13.7	16.0	14.1	17.2	14.3	15.2	15.3	14.5	10.0	16.5	15.2	29.2	2.0	12.8
Female	13.6	12.6	14.3	15.8	15.2	13.2	16.0	13.4	15.6	14.3	13.8	9.4	15.0	14.7	28.3	1.8	11.2
15-44 Years, Total	42.7	42.3	42.5	45.8	39.6	39.7	39.9	37.1	40.5	37.8	45.7	30.0	42.4	45.5	31.8	41.1	56.5
Male	19.7	19.7	19.5	20.7	19.4	18.6	19.1	19.5	20.5	17.5	21.7	12.1	19.7	22.1	15.1	18.8	26.7
Female	22.9	22.6	23.0	25.1	20.3	21.1	21.0	17.6	20.0	20.3	24.1	17.9	22.7	23.4	16.7	22.3	29.7
45-64 Years, Total	20.9	21.6	20.7	17.0	20.6	22.4	19.4	24.2	20.1	19.6	21.2	21.5	19.6	21.0	8.3	38.0	14.8
Male	10.1	10.1	10.5	8.3	10.5	12.5	10.3	11.6	9.3	9.1	11.4	7.8	9.7	11.1	4.0	18.8	7.2
Female	10.8	11.5	10.2	8.7	10.0	9.9	9.1	12.6	10.8	10.5	10.8	13.7	9.9	9.9	4.3	19.2	7.6
65 Years and Over, Total	8.1	8.6	7.5	7.7	8.5	10.6	7.4	10.8	8.6	12.9	4.1	29.0	6.4	3.5	2.4	16.9	4.6
Male	3.7	3.8	3.5	3.7	4.6	5.1	4.2	4.7	5.1	5.9	2.2	12.9	3.2	1.8	1.1	8.3	2.0
Female	4.4	4.7	4.0	4.1	3.9	5.5	3.2	6.1	3.4	7.0	1.9	16.2	3.2	1.7	1.3	8.6	2.6

Note: For interview period May, 1954 - April, 1955.
See "definitions of terms" and "method of rounding estimates".

Table 3

PERCENT COMPARISON OF CHARACTERISTICS OF THE CALIFORNIA HEALTH SURVEY SAMPLE[1] WITH INDEPENDENT ESTIMATES[2]

CHARACTERISTIC	SOURCE OF ESTIMATE		CHARACTERISTIC	SOURCE OF ESTIMATE	
	Survey	Other		Survey	Other
Age			Activity Status		
0-14 years	29.0	28.7	Worker	37.4	36.9
15-44 years	41.9	42.3	Housewife	22.0	20.9
45-64 years	20.8	20.4	Unable to work	2.1	2.4
65 years and over	8.2	8.7	Other	35.3	39.8
			Unknown	3.2	-
Sex					
Male	48.7	49.8	Family Income		
Female	51.3	50.2	Less than $2,000	12.2	20.8
			$2,000 - $4,999	41.0	52.8
Race			$5,000 and over	42.7	26.3
White (including Spanish Surname)	92.9	93.7	Unknown	4.1	-
Negro	5.4	4.4	Geographic Area		
Other	1.7	2.0	Metropolitan[3]	73.8	71.8
			Remainder	26.1	28.2
Marital Status					
Married	50.4	51.8			
Widowed and divorced	9.6	9.4			
Never married	40.0	38.8			

1 Survey estimates are subject to sampling variation, and cover the interview period May, 1954 - April, 1955.

2 For age and sex the estimates are for 1954 and were published by the State of California, Department of Finance. For the remaining characteristics, the estimates are for 1950 (except income, which refers to 1949) and were published by the U. S. Department of Commerce, Bureau of the Census.
The Census estimates include persons in the armed forces who were quartered on military installations in California as residents of the State.

3 See Appendix B - "Definitions of Terms".

Table 4

NUMBER AND PERCENT OF POPULATION
0-4 AND 5-14 YEARS BY SEX

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	Number	Percent
0-4 Years	3,542	11.1
Male	1,821	5.7
Female	1,721	5.4
5-14 Years	5,678	17.9
Male	2,924	9.2
Female	2,754	8.7

Note: For the interview period May, 1954 - April, 1955. See "definitions of terms" and "method of rounding estimates".

Table 5

INCIDENCE OF ILLNESS PER 1,000 PERSONS PER YEAR BY AGE, SEX, DIAGNOSIS AND ACUTE OR CHRONIC ILLNESS

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

DIAGNOSIS	GROUP CODE	BOTH SEXES			TOTAL ILLNESS												ACUTE ILLNESS											
					Male						Female						Male						Female					
		Total	Acute	Chronic	Total	0–4	5–14	15–44	45–64	65 and Over	Total	0–4	5–14	15–44	45–64	65 and Over	Total	0–4	5–14	15–44	45–64	65 and Over	Total	0–4	5–14	15–44	45–64	65 and Over
Infective and Parasitic Diseases																											
Common childhood diseases	03	60	60	1	65	150	240	2	-	10	55	197	190	6	-	-	65	150	240	2	-	10	53	197	180	6	-	-
Other	01,02,04	45	24	21	52	129	27	42	56	41	39	76	43	44	8	38	28	100	22	19	20	-	21	61	14	26	-	9
Respiratory																											
Common cold, sore throat, cough and nasopharyngitis	10	1,371	1,205	166	1,377	2,686	1,776	1,201	874	746	1,365	2,375	1,744	1,278	936	873	1,196	2,279	1,535	1,061	735	715	1,212	2,163	1,469	1,144	855	778
Bronchitis and chest cold	11	172	120	52	170	286	254	129	140	93	174	288	175	130	204	190	123	207	174	108	84	62	117	220	100	88	158	76
Pneumonia	12	11	9	2	8	14	-	6	12	21	14	53	-	11	12	19	8	14	-	4	12	21	10	53	-	6	4	19
Chronic tonsillitis or sore throat	13	43	6	37	43	129	93	23	4	-	43	83	152	20	-	-	10	7	31	8	-	-	2	-	9	2	-	-
Chronic sinusitis	14	161	4	157	145	7	76	200	160	197	176	15	38	222	285	152	3	-	4	6	-	-	4	8	5	4	4	-
Other	15	44	24	20	43	21	40	44	60	31	45	106	52	28	15	114	27	7	36	27	36	10	22	46	33	11	12	47
Gastro-Intestinal																											
Dysentery and diarrhea	20	42	31	10	37	107	13	42	24	-	46	76	66	51	15	19	28	79	13	29	20	-	35	76	66	31	8	9
Indigestion	21	165	109	56	170	86	205	189	132	207	159	159	213	140	154	161	106	71	165	127	40	83	112	144	190	88	96	76
Intestinal flu	22	182	177	5	181	236	209	216	80	124	183	288	270	185	100	76	178	236	209	210	76	124	177	288	251	182	96	66
Dental problems	28	60	46	14	54	64	53	65	44	10	67	83	52	75	65	38	42	57	53	44	32	10	50	53	43	64	35	28
Constipation	2X	120	28	92	67	21	53	48	80	228	170	61	57	176	247	313	19	7	40	10	20	31	36	-	19	33	62	66
Other	23-27,2R	160	25	134	173	107	44	173	292	258	145	31	10	132	250	302	36	86	31	26	32	31	15	23	-	14	20	38
Cardiovascular																											
Varicose veins	38	46	-	46	12	-	-	17	20	10	78	-	-	114	92	114	-	-	-	-	-	-	-	-	-	-	-	-
Hemorrhoids	39	70	1	69	54	-	4	81	84	42	85	-	-	130	104	85	2	-	-	2	4	-	1	-	-	-	4	-
Hypotension	3X	9	1	9	8	-	-	2	24	21	11	-	-	11	23	19	2	-	-	2	4	-	-	-	-	-	-	-
Hypertension without heart involvement	35	43	-	43	25	-	-	15	68	62	61	-	-	46	104	228	-	-	-	-	-	-	-	-	-	-	-	-
Other	30-34,36 37,3R	81	8	73	62	-	35	10	116	322	102	8	24	58	150	492	4	-	13	-	8	-	13	-	-	4	19	85
Genito-Urinary																											
Diseases of kidney	40,41	31	3	28	13	-	-	12	32	20	46	23	14	59	46	76	2	-	-	-	2	4	4	-	-	8	-	9
Disorders of menstruation	43	b	b	b	-	-	-	-	-	-	188	-	66	377	65	-	-	-	-	-	-	-	41	-	14	86	4	-
Menopausal symptoms	44	b	b	b	-	-	-	-	-	-	71	-	-	75	185	-	-	-	-	-	-	-	6	-	-	7	15	-
Other	42,45,46	50	8	42	26	-	-	16	60	83	73	8	10	108	92	47	8	-	-	6	24	-	9	8	5	13	8	9
Diseases of Muscle, Bone and Joint																											
Arthritis and rheumatism	55	137	6	132	102	-	4	58	232	363	170	-	5	134	343	484	7	-	4	12	4	-	5	-	-	6	12	-
Back conditions	56	138	13	125	107	-	9	160	128	176	168	-	24	242	231	133	17	-	-	19	24	52	10	-	-	7	19	38
Other	57	54	7	47	53	-	13	89	60	21	55	-	5	72	62	123	7	-	-	8	12	10	7	-	-	7	8	28
Neoplasms	60-62	30	9	20	15	7	4	16	20	21	44	23	10	63	42	47	6	-	-	8	12	-	13	15	10	13	12	18
Eye conditions including blindness	70-72	37	12	25	32	64	31	27	44	41	43	53	43	37	47	56	5	7	13	-	4	10	19	30	24	17	19	9
Diseases of ear and mastoid including deafness	73-74	80	34	45	72	200	120	27	48	62	87	182	100	66	77	76	37	150	49	12	24	-	32	129	43	18	15	-
Anemia NEC	80	28	1	27	4	21	-	2	4	-	50	8	14	79	54	19	1	7	-	-	-	-	2	-	-	4	-	-
Neuritis, neuralgia, etc.	85	25	2	23	13	-	-	12	28	31	37	8	-	31	85	57	2	-	-	-	4	10	2	-	-	4	-	9
Skin affections and diseases	88	16	11	5	17	23	21	17	12	11	16	18	19	17	13	14	7	14	13	7	2	2	4	8	11	2	a	-
Results of old accidents[1]	89	63	7	56	71	14	45	85	80	124	56	-	9	70	39	190	8	-	13	10	8	-	6	-	-	4	4	38
Migraine and headache	90	506	258	249	342	21	98	549	387	228	663	-	128	1,087	678	351	192	14	45	341	184	73	320	-	43	553	301	133
Asthma and hayfever	92	210	a	209	201	71	223	214	228	207	217	61	133	299	250	85	-	-	-	-	-	-	1	8	-	-	-	-
Other allergies	93	136	9	127	102	179	169	62	112	10	168	182	118	176	216	95	8	21	13	2	8	10	10	8	14	11	4	9
All other conditions	Residual of(01-99)	391	124	267	205	227	203	186	100	195	299	292	253	436	233	240	65	118	113	47	31	49	99	40	20	168	41	97
Symptoms	XO-X2	235	85	150	163	71	134	175	188	248	303	106	171	343	389	398	66	43	58	70	68	93	103	91	67	106	111	152
Accidents, current	RO-R5	708	679	29	772	1,293	1,010	789	415	311	648	1,055	848	562	528	493	739	1,272	1,006	756	363	290	621	1,025	825	542	497	446
Fractures and dislocations	RO	24	23	1	26	7	4	37	40	10	22	8	14	24	27	38	25	7	4	35	40	10	20	8	14	21	27	38
Sprains and strains	R1	91	85	6	98	14	85	150	64	83	84	-	71	88	92	180	90	7	85	144	52	73	79	-	66	86	81	161
Lacerations and open wounds	R2	177	170	7	208	393	231	227	112	43	148	258	190	143	104	66	197	386	231	210	100	43	145	243	190	142	104	57
Superficial injury and contusions	R3	232	226	6	243	450	427	189	112	124	221	425	374	147	196	114	240	443	427	184	112	124	212	410	365	141	188	95
Burns	84	62	61	1	47	50	58	60	24	10	77	83	38	108	73	-	47	50	58	60	24	10	75	83	38	107	68	-
All other	R5	121	113	8	150	379	205	125	64	41	94	281	161	51	35	95	141	379	200	121	36	30	88	281	152	44	27	95

[1] Accidents starting sometime prior to the four week period preceding the week of interviews.

[a] Less than 0.5 per 1,000 persons per year.
[b] Not applicable.

Note: For the interview period May, 1954 - April, 1955.
See "definitions of terms" and "method of rounding estimates".
See Appendix D, group coding of ISC classification.

Table 6

INCIDENCE OF ILLNESS PER 1,000 PERSONS PER YEAR
TOTAL AND THOSE CAUSING ONE OR MORE DAYS OF DISABILITY BY DIAGNOSIS, AGE AND SEX

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

DIAGNOSIS	TOTAL										DISABLING ILLNESS									
	Male					Female					Male					Female				
	Total	0-14	15-44	45-64	65 and Over	Total	0-14	15-44	45-64	65 and Over	Total	0-14	15-44	45-64	65 and Over	Total	0-14	15-44	45-64	65 and Over
Total	5,056	5,602	4,991	4,448	4,574	6,430	5,388	7,190	6,439	6,217	1,688	2,808	1,299	998	1,182	2,141	2,841	2,040	1,557	1,848
Acute Illnesses	3,054	4,297	2,983	1,897	1,700	3,195	3,931	3,278	2,343	2,292	1,214	2,260	918	539	487	1,336	2,182	1,148	825	824
Respiratory	1,367	2,062	1,214	867	808	1,367	1,952	1,255	1,033	920	668	1,337	447	272	270	719	1,238	551	528	370
Gastro-intestinal	329	417	372	152	228	330	513	307	204	170	196	304	189	92	93	226	383	211	112	85
Other communicable	93	257	21	20	10	74	219	32	-	9	79	230	19	-	10	63	198	17	-	9
Accidents	739	1,108	756	363	290	621	902	541	497	446	158	186	196	80	73	119	177	90	92	142
All other	526	453	620	495	364	807	345	1,143	609	747	114	203	57	95	41	209	186	279	93	218
Chronic Illnesses	2,002	1,305	2,008	2,551	2,874	3,226	1,457	3,912	4,096	3,925	474	548	381	459	695	806	659	893	732	1,024
Cardiovascular	83	14	27	176	384	163	18	100	235	635	30	-	15	64	135	57	15	31	85	256
Respiratory	419	524	389	383	280	450	501	434	419	428	163	351	89	72	52	177	366	97	104	161
Arthritis and rheumatism	95	-	46	228	363	165	3	128	331	484	15	-	21	20	31	42	3	37	54	161
Other neuromuscular and bone diseases	137	14	222	156	135	212	18	309	266	209	25	5	33	36	31	41	-	59	39	95
All other	1,265	753	1,324	1,608	1,712	2,236	725	2,941	2,845	2,169	241	192	223	268	446	489	276	669	451	351

Note: For the interview period May, 1954 - April, 1955.
See "definitions of terms" and "method of rounding estimates".

Table 7

NUMBER OF PERSONS WITH ONE OR MORE ILLNESSES DURING
PAST FOUR WEEKS PER 1,000 PERSONS BY AGE, SEX AND TYPE OF ILLNESS

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	TYPE OF ILLNESS				
	No Illness	All Illness	Acute Illness Only	Chronic Illness Only	Acute and Chronic Illness
All Ages	484	516	117	271	128
Male	521	479	125	242	112
Female	448	552	109	300	143
0-14 years	576	424	207	120	97
Male	570	430	208	122	100
Female	582	418	205	118	95
15-44 years	482	518	103	268	147
Male	545	455	114	216	125
Female	427	573	93	313	167
45-64 years	433	567	52	386	129
Male	481	519	59	356	104
Female	387	613	45	416	152
65 years and over	295	705	34	533	138
Male	331	669	34	523	112
Female	264	736	33	542	161

Note: For the interview period May, 1954 - April, 1955.
See "definitions of terms" and "method of rounding estimates".

Table 8

DAYS OF DISABILITY PER PERSON PER YEAR BY AGE, SEX AND TYPE OF ILLNESS

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	DAYS OF DISABILITY AND TYPE OF ILLNESS			
	Total	Acute Illness Only	Chronic Illness Only	Acute and Chronic Illness
Total, All Ages	23.93	3.70	13.55	6.67
Male	21.81	3.65	13.03	5.13
Female	25.95	3.74	14.04	8.16
0-14 years	17.80	8.16	4.39	5.25
Male	17.56	8.04	4.30	5.22
Female	18.05	8.29	4.50	5.26
15-44 years	16.91	2.33	8.72	5.86
Male	13.00	2.04	7.21	3.75
Female	20.37	2.59	10.05	7.73
45-64 years	30.16	1.28	21.90	6.98
Male	28.24	0.97	21.82	5.45
Female	32.02	1.59	21.98	8.45
65 years and over	65.33	1.11	49.31	14.91
Male	64.98	2.06	52.38	10.54
Female	65.66	0.24	46.51	18.91

Note: For the interview period May, 1954 - April, 1955.
See "definitions of terms" and "method of rounding estimates".

Table 9

DAYS OF DISABLING ILLNESS PER PERSON PER YEAR BY AGE, SEX AND DIAGNOSIS

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	TOTAL	ACUTE ILLNESS						CHRONIC ILLNESS					
		Total	Respiratory	Gastro-Intestinal	Other Communicable	Accidents	All Other	Total	Cardio-vascular	Respiratory	Arthritis and Rheumatism	Other Neuromuscular and Bone Diseases	All Other
Total, All Ages	23.93	7.44	3.23	.75	.80	.67	1.88	16.48	2.93	1.41	1.38	2.18	8.57
Male	21.81	6.57	3.05	.61	.90	.74	1.26	15.24	2.79	1.29	1.03	2.34	7.79
Female	25.95	8.26	3.59	.88	.70	.61	2.47	17.66	3.06	1.53	1.73	2.02	9.32
0-14 Years, Total	17.80	11.89	6.01	1.11	2.51	.64	1.61	5.90	.36	2.78	a	.18	2.55
Male	17.56	12.08	6.17	.99	2.75	.67	1.50	5.48	.14	2.26	-	.28	2.80
Female	18.05	11.69	5.84	1.24	2.27	.61	1.73	6.36	.59	3.34	.06	.08	2.29
15-44 Years, Total	16.91	5.57	1.96	.68	.09	.74	2.11	11.34	.81	.57	.44	2.16	7.35
Male	13.00	4.16	1.57	.52	.05	.97	1.05	8.84	.63	.41	.36	2.29	5.15
Female	20.37	6.82	2.31	.82	.12	.53	3.04	13.54	.96	.72	.51	2.05	9.30
45-64 Years, Total	30.16	5.09	2.46	.54	-	.56	1.54	25.01	5.12	.96	2.97	3.34	12.62
Male	28.24	3.44	1.31	.34	-	.52	1.27	24.80	5.85	1.11	1.92	3.93	11.99
Female	32.02	6.68	3.56	.73	-	.60	1.79	25.21	4.42	.82	3.98	2.77	13.22
65 Years and Over, Total	65.33	7.12	3.03	.38	.38	.78	2.54	58.21	17.19	2.00	7.00	6.30	25.73
Male	64.98	5.80	3.09	.39	.51	.47	1.33	59.19	15.57	2.50	5.91	6.27	28.93
Female	65.66	8.33	2.97	.38	.27	1.07	3.65	57.32	18.67	1.54	8.00	6.32	22.80

a. Less than .005
Note: For the interview period May, 1954 - April, 1955.
See "definitions of terms" and "method of rounding estimates".
See Appendix D, group coding of ISC classification.

Table 10

DAYS OF DISABLING ILLNESS PER 1,000 PERSONS PER YEAR BY AGE, SEX, DIAGNOSIS AND WHETHER ACUTE OR CHRONIC ILLNESS

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

DIAGNOSIS	GROUP CODE	BOTH SEXES			TOTAL ILLNESS												ACUTE ILLNESS											
					Male						Female						Male						Female					
		Total	Acute	Chronic	Total	0-4	5-14	15-44	45-64	65 and Over	Total	0-4	5-14	15-44	45-64	65 and Over	Total	0-4	5-14	15-44	45-64	65 and Over	Total	0-4	5-14	15-44	45-64	65 and Over
Infectious and Parasitic Diseases																												
Active tuberculosis	01	160	-	160	160	-	-	230	220	290	160	-	130	310	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arrested tuberculosis and late effects	02	60	-	60	70	-	-	-	340	-	40	-	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common childhood diseases	03	670	670	a	780	1,220	3,250	10	-	220	570	2,260	1,930	30	-	-	780	1,220	3,250	10	-	220	570	2,260	1,890	30	-	-
Other	04	380	130	250	490	510	240	520	540	770	260	610	270	250	110	270	130	510	130	50	-	290	130	290	210	90	-	270
Respiratory																												
Common cold, sore throat, cough and nasopharyngitis	10	3,130	2,650	480	2,870	8,550	4,580	1,360	1,110	2,790	3,370	7,250	4,770	2,290	3,000	2,350	2,400	6,770	3,790	1,230	940	2,470	2,880	6,310	3,630	2,020	2,740	1,940
Bronchitis and chest cold	11	710	390	320	590	1,990	900	240	220	560	820	2,740	680	300	860	1,380	360	1,220	540	220	120	50	420	1,180	210	140	650	790
Pneumonia	12	170	120	50	130	10	120	80	250	280	190	590	40	170	200	170	100	10	120	50	140	280	150	590	40	110	130	40
Chronic tonsillitis and sore throat	13	270	40	230	220	440	770	60	a	-	310	640	1,370	30	-	-	50	30	240	10	-	-	20	-	120	a	-	-
Chronic sinsitis	14	130	10	120	110	-	160	110	180	20	160	70	160	140	240	100	10	-	60	-	-	-	10	60	30	-	-	-
Other	15	330	120	210	410	90	260	140	660	1,940	260	430	640	110	80	500	120	20	250	60	120	290	110	170	320	40	50	200
Gastro-Intestinal																												
Dysentery and diarrhea	20	60	50	10	30	80	30	30	20	-	90	90	170	90	40	20	30	60	30	30	20	-	70	80	170	60	40	20
Indigestion	21	320	160	160	260	180	400	290	150	240	380	230	290	500	250	370	130	140	240	140	40	20	190	230	240	240	110	70
Intestinal flu	22	530	510	20	430	690	740	350	180	350	620	1,020	860	530	510	410	420	690	730	340	170	350	590	1,020	790	520	470	280
Ulcers, stomach and duodenum	24	240	-	240	320	-	-	410	570	440	170	-	-	210	360	120	-	-	-	-	-	-	-	-	-	-	-	-
Hernias	25	190	-	190	380	70	-	200	610	2,070	10	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diseases of gallbladder	26	140	a	140	40	-	-	-	140	120	230	-	-	130	480	920	-	-	-	-	-	-	10	-	-	a	-	-
Diseases of liver	27	80	-	80	80	-	-	90	170	100	80	-	-	60	170	270	-	-	-	-	-	-	-	-	-	-	-	-
Dental problems	28	130	50	80	50	40	40	30	130	-	200	800	150	120	200	30	30	40	40	20	20	-	80	140	120	90	10	30
Gastro-intestinal symptoms due to nerves	29	20	10	10	150	-	-	20	30	-	30	-	-	60	-	20	-	-	-	-	-	-	20	-	-	40	-	-
Constipation	2X	40	10	30	60	-	120	-	120	100	30	-	10	10	a	280	20	-	120	-	-	-	-	-	-	-	-	-
Other	23,2R	360	100	260	300	250	120	390	380	60	420	-	100	330	710	1,310	90	250	90	40	140	20	100	-	-	-	370	260
Cardiovascular																												
Rheumatic fever	30	90	-	90	60	-	110	90	-	-	130	-	260	130	120	-	-	-	-	-	-	-	-	-	-	-	-	-
Rheumatic heart disease	31	90	-	90	30	-	120	-	50	-	140	-	-	130	280	270	-	-	-	-	-	-	-	-	-	-	-	-
Arteriosclerotic heart disease including coronary disease with or without hypertension	32	680	a	680	850	-	-	60	2,740	3,100	530	-	-	50	950	3,680	10	-	-	-	a	-	-	-	-	-	-	-
Hypertensive heart disease without coronary or arteriosclerotic heart disease	33	350	-	350	210	-	-	-	490	1,370	470	-	-	100	780	3,200	-	-	-	-	-	-	-	-	-	-	-	-
General arteriosclerosis	34	100	-	100	100	-	-	-	150	880	110	-	-	-	-	1,260	-	-	-	-	-	-	-	-	-	-	-	-
Hypertension without heart involvement	35	710	-	710	490	-	-	190	840	2,950	910	-	-	360	1,700	4,800	-	-	-	-	-	-	-	-	-	-	-	-
Other heart conditions	36	590	a	590	740	-	-	290	970	5,150	440	-	-	130	320	3,860	-	-	-	-	-	-	a	-	-	10	-	-
Vascular lesions affecting central nervous system	37	200	a	200	180	-	-	-	340	1,310	230	80	530	-	100	1,330	-	-	-	-	-	-	10	-	-	-	40	-
Varicose veins	38	160	-	160	140	-	-	10	360	730	190	-	-	120	250	980	-	-	-	-	-	-	-	-	-	-	-	-
Hemorrhoids	39	100	a	100	100	-	-	110	240	140	90	-	-	110	210	40	a	-	-	10	-	-	-	-	-	-	-	-
Hypotension	3X	80	10	70	90	-	-	-	450	-	60	-	-	130	10	10	-	-	-	-	-	-	20	-	-	40	-	-
Other conditions of lymph and circulatory system	3R	250	130	120	180	-	40	a	350	1,160	330	20	120	160	490	1,580	50	-	40	-	70	350	210	20	-	90	280	1,310
Genito-Urinary																												
Nephritis and nephrosis	40	100	a	90	70	-	340	10	-	-	120	-	-	190	190	-	-	-	-	-	-	-	a	-	-	10	-	-
Other diseases of kidney	41	110	10	100	60	20	-	100	40	180	160	60	20	260	60	220	10	-	-	10	40	-	a	-	-	a	-	-
Other diseases of genito-urinary system	42	70	10	60	10	-	-	20	-	30	120	110	20	130	200	70	10	-	-	a	-	-	20	110	20	-	10	-
Disorders of menstruation	43	b	b	b	-	-	-	-	-	-	230	-	140	370	230	-	-	-	-	-	-	-	50	-	30	60	80	-
Menopausal symptoms	44	b	b	b	-	-	-	-	-	-	230	-	-	180	720	-	-	-	-	-	-	-	20	-	-	10	80	-
Diseases and disorders of breast and female genital organs	45	b	b	b	-	-	-	-	-	-	480	-	10	780	670	-	-	-	-	-	-	-	10	-	10	10	-	-
Diseases of male organs	46	b	b	b	280	-	-	40	520	1,930	-	-	-	-	-	-	30	-	-	40	60	-	-	-	-	-	-	-
Childbirth																												
Delivery, with or without complications	50	b	b	b	-	-	-	-	-	-	450	-	-	1,040	-	-	-	-	-	-	-	-	430	-	-	1,000	-	-
Disorders of pregnancy and puerperium	51	b	b	b	-	-	-	-	-	-	180	-	-	420	-	-	-	-	-	-	-	-	180	-	-	420	-	-
Diseases of infancy	53	10	10	a	10	50	-	-	-	-	20	210	-	-	-	-	10	50	-	-	-	-	20	210	-	-	-	-
Diseases of Muscle, Bone and Joint																												
Arthritis and rheumatism	55	1,400	10	1,390	1,040	-	20	380	1,940	5,910	1,750	-	100	520	3,990	8,040	20	-	20	20	30	-	10	-	-	10	a	40
Back conditions	56	950	70	880	860	-	20	1,200	1,270	1,280	950	-	130	1,550	1,170	1,150	80	-	-	80	130	290	50	-	-	60	20	280
Other muscles, bone and joint involvement	57	760	60	700	990	200	190	1,100	1,800	1,380	540	-	-	490	710	2,140	30	-	-	80	10	-	80	-	-	80	80	300

Table 10

DAYS OF DISABLING ILLNESS PER 1,000 PERSONS PER YEAR BY AGE, SEX, DIAGNOSIS AND WHETHER ACUTE OR CHRONIC ILLNESS

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

DIAGNOSIS	GROUP CODE	BOTH SEXES			TOTAL ILLNESS												ACUTE ILLNESS											
					Male						Female						Male						Female					
		Total	Acute	Chronic	Total	0-4	5-14	15-44	45-64	65 and Over	Total	0-4	5-14	15-44	45-64	65 and Over	Total	0-4	5-14	15-44	45-64	65 and Over	Total	0-4	5-14	15-44	45-64	65 and Over
Neoplasms																											
Malignant	60	280	20	260	220	-	120	80	480	760	340	-	-	280	540	1,330	20	-	-	40	-	-	20	-	-	-	-	260
Benign	61	170	20	140	60	-	80	50	100	-	270	250	20	300	540	-	a	-	-	-	10	-	40	40	20	70	40	-
Unspecified	62	160	-	160	230	-	-	120	180	1,780	90	-	-	40	290	210	-	-	-	-	-	-	-	-	-	-	-	-
Other Specified Diseases																											
Eye conditions including blindness	70-72	560	10	550	610	100	280	210	870	3,430	520	100	40	160	1,310	1,880	a	20	10	-	-	-	20	20	30	20	-	30
Deafness and deaf mutism	73	160	-	160	230	-	-	110	320	1,440	100	-	-	50	110	660	-	-	-	-	-	-	-	-	-	-	-	-
Other diseases of ear and mastoid	74	280	170	110	260	1,510	320	-	110	10	300	1,430	210	140	40	590	170	980	190	-	80	-	170	1,110	120	70	10	-
Epilepsy	75	70	-	70	90	-	-	60	10	760	50	70	-	a	70	280	-	-	-	-	-	-	-	-	-	-	-	-
Cerebral palsy	76	10	-	10	10	-	a	-	-	-	20	210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Late effects of polio	77	120	-	120	90	180	-	50	220	-	160	-	-	320	110	-	-	-	-	-	-	-	-	-	-	-	-	-
Absence or amputation of member	78	40	-	40	50	-	-	20	-	580	20	-	-	-	-	270	-	-	-	-	-	-	-	-	-	-	-	-
Diseases of central nervous system affecting motion	79	590	-	590	610	200	-	140	1,010	3,910	580	-	-	150	990	3,620	-	-	-	-	-	-	-	-	-	-	-	-
Anemia NEC	80	180	-	180	10	-	-	-	60	-	350	-	120	400	550	460	-	-	-	-	-	-	-	-	-	-	-	-
Other diseases of blood forming organs	81	40	a	40	10	10	-	30	-	-	70	-	30	a	220	270	-	-	-	-	-	-	10	-	30	-	-	-
Glandular problems	82	100	10	90	20	-	60	-	40	-	170	-	130	270	160	-	-	-	-	-	-	-	20	-	-	40	-	-
Diabetes	83	160	-	160	90	-	-	10	80	910	210	-	-	100	440	940	-	-	-	-	-	-	-	-	-	-	-	-
Inflammatory diseases of central nervous system	84	50	a	40	40	60	-	30	110	-	50	-	-	10	120	270	10	60	-	-	-	-	-	-	-	-	-	-
Neuritis, neuralgia	85	120	a	110	120	-	-	90	100	850	110	-	-	60	60	840	10	-	-	-	10	40	a	-	-	10	-	-
Vitamin deficiency	86	10	a	10	-	-	-	-	-	-	20	-	-	a	-	200	-	-	-	-	-	-	a	-	-	a	-	-
Congenital malformations	87	70	a	70	30	-	180	-	-	-	100	-	250	80	120	-	-	-	-	-	-	-	a	-	10	-	-	-
Skin affections and diseases	88	470	240	240	520	420	370	430	470	1,600	420	450	400	420	390	480	250	400	340	170	110	490	230	370	310	210	90	310
Results of old accidents[1]	89	1,120	260	860	1,430	100	360	1,240	2,900	2,980	830	20	130	550	1,000	4,290	260	100	150	360	350	-	260	20	130	180	460	690
Migraine and headache	90	330	40	290	130	20	90	150	140	220	520	-	210	690	620	620	30	20	30	50	a	70	50	-	90	70	30	10
Mental disturbances	91	400	10	400	340	-	370	420	300	490	460	-	30	360	600	2,070	-	-	-	-	-	-	10	-	-	-	70	-
Asthma and hayfever	92	470	a	470	460	310	630	140	310	2,230	490	360	390	380	920	330	-	-	-	-	-	-	a	40	-	-	-	-
Other allergies	93	170	10	160	140	630	300	10	20	70	190	80	180	240	60	460	10	-	20	-	20	-	20	-	-	20	10	70
Stammering, stuttering and other speech disturbances	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overweight	95	80	-	80	70	-	-	-	110	580	80	-	-	110	110	120	-	-	-	-	-	-	-	-	-	-	-	-
Other	99	10	-	10	10	-	-	-	60	30	10	-	-	-	40	-	-	-	-	-	-	-	-	-	-	-	-	-
Symptoms																												
Referable to cardiovascular and nervous system	X0	150	10	140	80	20	10	30	50	630	220	0	40	240	450	190	a	20	-	10	-	-	10	-	10	10	10	10
Referable to respiratory, gastro-intestinal and genito-urinary systems	X1	130	20	110	100	-	20	20	220	510	170	80	50	170	120	340	-	-	-	-	-	-	40	-	10	50	80	40
Other and ill defined symptoms	X2	780	200	580	570	170	60	350	830	2,700	980	590	120	1,150	930	2,640	140	160	20	130	290	100	250	490	90	360	110	10
Accidents, current		720	680	40	780	490	810	1,040	530	530	660	450	750	550	750	1,150	730	490	780	970	520	470	620	440	720	530	600	1,070
Fractures and dislocations	X0	150	140	10	90	-	-	100	210	100	200	10	100	130	350	680	90	-	-	100	210	100	180	10	100	130	240	680
Sprains and strains	X1	160	150	10	170	-	150	300	50	100	150	-	150	180	150	150	170	-	150	300	50	100	120	-	110	180	120	80
Lacerations and open wounds	X2	120	120	a	160	350	130	200	40	-	80	170	80	80	60	-	160	350	130	190	40	-	80	160	80	80	60	-
Superficial injury and contusions	X3	100	100	-	100	60	200	40	150	150	100	30	230	50	120	100	100	60	200	40	150	150	100	30	230	50	120	100
Burns	X4	50	50	-	80	30	220	80	-	10	30	30	30	10	60	-	80	30	220	80	-	10	30	30	30	10	60	-
All other	X5	140	120	20	180	60	110	310	170	170	110	210	170	100	-	210	130	60	80	250	70	110	110	210	170	80	-	210

[1] Accidents starting sometime prior to four weeks preceding date of interview.

[a] Less than five days per 1,000 persons per year.
[b] Not applicable.

Note: For the interview period May, 1954 - April, 1955.
See "definitions of terms" and "methods of rounding estimates".
See Appendix D, group coding of ISC classification.

Table 11

NUMBER OF PERSONS EXPERIENCING CHRONIC CONDITIONS DURING A YEAR
PER 1,000 PERSONS PER YEAR BY AGE, SEX AND EFFECT OF CHRONIC CONDITIONS

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	TOTAL WITH ONE OR MORE CHRONIC CONDITIONS	SEVERITY OF CHRONIC CONDITIONS										
		Disability in Past Twelve Months			Causing Limitation[1] of Activity						Meet One or More of Three Criteria[2]	Do Not Meet Any of Three Criteria[2]
		No Days	One or More Days	One or More Days in Bed	No Limitation	Total Causing Limitation	Group 1	Group 2	Group 3	Group 4		
All Ages, Total	503	328	174	133	396	107	5	20	47	36	335	168
Male	470	313	156	115	368	102	4	29	39	30	299	171
Female	534	342	192	151	422	112	5	12	54	41	369	165
15 Years and Over	589	393	196	149	447	142	6	27	61	48	390	199
Male	541	372	169	122	403	138	6	41	51	40	340	201
Female	632	411	221	173	486	146	6	15	70	55	436	196
0-14 Years, Total	291	169	123	96	268	23	2	4	12	5	199	93
Male	307	179	128	99	284	23	1	4	12	6	206	102
Female	274	158	117	92	251	23	3	3	13	4	191	83
15-44 Years, Total	529	352	177	139	444	85	1	8	43	33	333	196
Male	470	332	138	103	391	79	2	10	37	30	269	201
Female	582	370	212	170	491	91	1	7	48	35	390	192
45-64 Years, Total	640	434	205	155	469	171	6	28	70	67	433	207
Male	601	408	193	143	432	169	6	45	60	58	395	206
Female	677	460	217	167	504	173	6	11	80	76	469	208
65 Years and Over, Total	768	496	272	183	412	356	29	125	127	75	575	192
Male	743	482	261	161	392	351	26	186	96	43	552	191
Female	791	508	282	204	431	360	32	69	155	104	597	193

[1] Group 1: cannot get around without help; Group 2: cannot carry on usual activity;
Group 3: can carry on usual activity, but must cut down on amount and kind;
Group 4: can carry on usual activity, but must cut down on other activities.

[2] Condition (a) disabled one or more days in past 12 months (b) limits activity (c) doctor seen regularly or occasionally.

Note: For the interview period May, 1954 to April, 1955.
See "definitions of terms" and "method of rounding estimates".

Table 12

CHRONIC CONDITIONS PER 1,000 PERSONS PER YEAR BY AGE, SEX, DIAGNOSIS, DISABILITY IN PAST YEAR AND WHETHER MEDICALLY ATTENDED

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

DIAGNOSIS	GROUP CODE	TOTAL			MEDICALLY ATTENDED						NON-MEDICALLY ATTENDED						MEDICALLY ATTENDED											
					Male			Female			Male			Female			Male						Female					
						In Past Year			In Past Year			In Past Year			In Past Year													
		Total	Male	Female	Total	No Days Dis.	1 or More Days	Total	No Days Dis.	1 or More Days	Total	No Days Dis.	1 or More Days	Total	No Days Dis.	1 or More Days	0-4	5-14	15-24	25-44	45-64	65 And Over	0-4	5-14	15-24	25-44	45-64	65 And Over
Infectious and Parasitic Diseases																												
Active tuberculosis	01	1.1	1.4	0.8	1.4	0.3	1.0	0.8	0.1	0.7	-	-	-	-	-	-	-	2.4	0.6	1.7	1.2	0.8	-	1.1	0.5	1.2	0.6	0.7
Arrested tuberculosis and late effects	02	1.7	2.0	1.4	2.0	1.5	0.5	1.4	1.0	0.4	-	-	-	-	-	-	-	0.3	0.6	2.1	5.5	0.8	2.9	-	1.1	1.4	2.1	1.5
Other	03-04	6.9	7.5	6.3	6.8	3.7	3.0	5.7	3.0	2.5	0.7	0.6	0.1	0.6	0.6	-	2.2	2.4	7.6	10.5	7.1	8.0	5.3	5.9	7.4	5.6	5.9	3.6
Respiratory																												
Common cold, sore throat, cough and nasopharyngitis	10	24.4	27.2	21.8	11.1	6.6	4.3	9.4	4.5	4.7	16.1	9.4	6.6	12.3	5.8	6.4	21.4	8.6	5.7	9.5	12.0	12.8	11.7	9.1	11.1	11.0	5.0	10.2
Bronchitis and chest cold	11	14.8	14.3	15.3	11.2	5.4	5.7	12.4	6.5	5.6	3.1	1.7	1.4	2.8	1.4	1.3	19.2	14.0	5.1	3.0	14.1	23.9	17.5	10.6	5.3	12.2	13.3	19.0
Chronic tonsillitis and sore throat	13	7.9	7.6	8.1	7.0	2.3	4.6	7.8	2.9	4.8	0.6	0.5	a	0.3	0.1	0.2	20.3	18.1	5.7	1.3	1.2	-	15.2	25.5	7.4	2.3	1.5	0.7
Chronic sinusitis	14	47.0	43.6	50.2	31.3	26.2	4.9	37.7	29.6	8.0	12.3	11.7	0.6	12.5	11.7	0.7	1.6	14.4	31.8	48.5	37.8	32.7	2.3	12.4	38.9	55.7	48.3	37.2
Other	12,15	7.0	6.9	7.2	6.2	3.7	2.6	6.3	3.7	2.4	0.7	0.5	0.3	0.9	0.6	0.3	1.0	2.1	7.6	4.7	9.5	18.3	5.3	4.7	6.3	7.4	4.8	10.2
Gastro-Intestinal																												
Dysentery and diarrhea	20	1.8	1.6	1.9	1.2	0.8	0.3	1.4	1.0	0.4	0.5	0.5	-	0.5	0.5	-	3.8	-	-	1.1	1.5	0.8	1.8	-	0.5	2.7	1.5	-
Indigestion	21	9.3	9.3	9.3	5.5	3.7	1.7	6.9	4.2	2.8	3.8	3.1	0.6	2.3	1.4	0.9	0.5	1.7	4.5	5.8	6.8	18.3	1.2	4.0	4.2	8.1	7.1	19.0
Ulcers, stomach and duodenum	24	13.2	19.1	7.6	18.4	12.1	6.2	7.4	5.1	2.3	0.7	0.6	a	0.2	0.2	-	1.1	0.3	5.7	31.6	29.2	25.5	-	-	1.6	11.0	13.3	11.7
Hernias	25	14.9	24.1	6.1	20.4	15.0	5.3	5.5	4.5	1.0	3.7	3.5	0.3	0.6	0.6	a	12.1	5.1	5.4	11.2	37.2	76.6	2.9	1.8	0.5	5.2	7.4	19.0
Diseases of gallbladder	26	10.7	5.1	16.1	5.0	3.2	1.7	15.1	9.5	5.5	0.1	0.1	-	0.9	0.9	-	-	1.0	0.6	3.9	11.7	13.6	-	-	4.2	14.3	30.5	45.3
Diseases of liver	27	3.7	3.5	3.9	3.2	2.4	0.8	3.5	2.4	1.0	0.3	0.3	-	0.4	0.4	-	-	1.0	0.6	3.4	6.4	7.2	-	0.4	2.6	2.5	5.9	13.1
Dental problems	28	3.9	3.1	4.7	2.7	2.1	0.5	4.0	2.9	0.9	0.4	0.4	-	0.6	0.6	-	2.2	1.0	3.2	3.2	3.1	4.0	7.0	4.7	5.8	2.5	4.7	0.7
Gastro-intestinal symptoms due to nerves	29	3.4	4.0	2.8	3.7	2.8	0.9	2.7	2.1	0.6	0.3	0.3	-	0.1	0.1	-	-	0.7	1.9	6.2	6.4	1.6	-	0.4	1.1	4.1	4.7	2.9
Constipation	2X	25.0	13.3	36.2	6.4	5.9	0.4	20.4	19.1	1.3	6.9	6.7	a	15.7	15.7	a	2.2	2.1	0.6	4.7	9.2	28.7	8.8	2.9	12.1	17.8	33.8	59.1
Other	22,23,2E	15.8	14.8	16.9	13.0	8.4	4.4	15.2	10.0	5.0	1.8	1.3	0.6	1.6	1.3	0.3	5.5	3.1	5.7	17.8	16.8	24.7	1.8	3.7	10.5	15.1	26.1	37.2
Cardiovascular																												
Rheumatic fever	30	1.6	1.1	2.0	1.1	0.5	0.6	2.0	1.1	0.9	-	-	-	-	-	-	-	1.7	4.5	0.4	0.9	-	0.6	4.4	4.7	1.4	1.2	-
Rheumatic heart disease	31	2.2	1.4	2.9	1.3	0.9	0.4	2.8	2.0	0.7	0.1	0.1	-	0.2	0.2	-	-	0.3	3.8	2.4	0.6	-	-	0.7	1.1	5.0	4.1	0.7
Arteriosclerotic heart disease including coronary disease with or without hypertension	32	7.3	9.0	5.6	9.0	4.5	4.5	5.6	2.6	2.9	-	-	-	a	-	a	-	-	-	2.1	23.6	42.3	-	-	-	0.4	11.6	36.5
Hypertensive heart disease without coronary or arteriosclerotic heart disease	33	3.8	2.1	5.5	1.9	0.8	1.2	5.5	3.1	2.4	0.1	0.1	-	-	-	-	-	-	-	0.4	4.3	11.2	-	-	-	1.4	11.0	33.6
General arteriosclerosis	34	3.0	3.5	2.5	3.0	2.3	0.7	2.3	1.4	0.9	0.5	0.4	-	0.2	0.2	-	-	-	-	-	4.6	25.5	-	-	-	0.8	2.7	18.2
Hypertention without heart involvement	35	27.7	18.1	36.8	17.0	14.2	2.7	35.7	28.4	7.0	1.1	1.1	-	1.2	1.0	0.2	-	-	8.9	12.5	33.2	67.0	-	11.1	8.4	19.7	71.1	161.3
Other heart conditions	36	15.7	15.3	16.6	14.5	9.7	4.7	15.5	10.1	5.3	0.8	0.8	-	0.6	0.6	a	2.7	3.8	5.1	9.0	22.1	69.4	2.9	1.8	8.4	9.7	21.9	75.2
Vascular lesions affecting central nervous system	37	1.1	1.4	0.9	1.3	0.5	0.8	0.9	0.2	0.7	0.1	0.1	-	-	-	-	0.5	1.7	-	0.4	1.5	5.6	0.6	1.8	0.5	-	0.6	4.4
Varicose veins	38	32.3	14.1	49.7	8.7	7.3	1.4	31.1	26.7	4.4	5.4	5.3	a	18.6	18.1	0.4	-	-	1.3	8.6	19.7	23.1	-	0.4	12.6	45.3	51.6	54.0
Hemorrhoids	39	35.0	29.5	40.2	18.9	14.7	4.0	26.2	21.0	4.7	10.6	10.2	0.4	14.0	13.6	0.4	-	0.3	10.2	31.6	29.2	27.1	-	0.4	16.8	42.2	40.6	29.2
Hypotension	3X	3.7	2.5	4.8	2.3	1.8	0.4	4.8	3.7	1.1	0.3	0.1	0.1	0.1	0.1	-	-	-	-	0.4	6.1	10.4	-	-	2.6	6.8	6.8	10.9
Other conditions of lymph and circulatory system	3R	4.6	3.0	6.1	2.8	1.6	1.2	5.4	4.0	1.4	0.1	0.1	-	0.7	0.6	0.1	-	-	-	1.7	7.4	9.6	0.6	1.1	2.1	5.4	11.0	10.9
Genito-Urinary																												
Nephritis and nephrosis	40	5.3	3.9	6.6	3.4	2.1	1.2	5.7	3.2	2.3	0.6	0.6	-	0.9	0.9	-	-	1.7	0.6	3.4	4.9	11.2	-	3.3	3.7	6.2	8.3	12.4
Other diseases of kidney	41	7.3	4.3	10.2	3.4	1.9	1.5	9.5	5.1	4.3	0.8	0.8	-	0.7	0.6	0.1	1.1	1.4	2.5	3.2	5.5	8.0	4.7	3.3	12.6	10.8	10.4	16.8
Other diseases of genito-urinary system	42	5.0	3.8	5.9	3.4	1.7	1.7	5.8	3.4	2.3	0.1	0.1	-	0.1	0.1	-	1.1	-	0.6	3.9	6.8	8.0	0.6	0.4	3.7	6.4	11.6	10.2
Disorders of menstruation	43	b	-	16.6	-	-	-	10.8	4.4	6.3	-	-	-	5.7	3.5	2.3	-	-	-	-	-	-	-	3.6	21.1	22.1	3.3	-
Menopausal symptoms	44	b	-	20.3	-	-	-	18.6	13.8	4.5	-	-	-	1.7	1.3	0.3	-	-	-	-	-	-	-	-	0.5	23.6	53.6	-
Diseases and disorders of breast and female genital organs	45	b	-	14.3	-	-	-	13.9	7.8	5.8	-	-	-	0.4	0.4	-	-	-	-	-	-	-	-	0.4	12.1	26.3	14.2	13.9
Diseases of male genital organs	46	b	4.7	-	4.6	2.7	1.5	-	-	-	0.1	0.1	-	-	-	-	1.1	0.3	1.3	3.2	8.9	18.3	-	-	-	-	-	-
Childbirth																												
Delivery, with or without complications	50	b	-	0.2	-	-	-	0.2	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.1	-	-	-
Disorders of pregnancy and puerperium	51	b	-	1.5	-	-	-	-	0.9	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.1	3.7	-	-
Diseases of infancy	53	0.3	0.6	0.1	0.6	0.5	0.1	0.1	0.1	-	-	-	-	-	-	-	3.8	-	-	0.4	0.3	-	-	-	-	0.2	-	-

Table 12

CHRONIC CONDITIONS PER 1,000 PERSONS PER YEAR BY AGE, SEX, DIAGNOSIS, DISABILITY IN PAST YEAR AND WHETHER MEDICALLY ATTENDED

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

DIAGNOSIS	GROUP CODE	TOTAL			MEDICALLY ATTENDED						NON-MEDICALLY ATTENDED						MEDICALLY ATTENDED											
					Male			Female			Male			Female			Male						Female					
						In Past Year			In Past Year			In Past Year			In Past Year													
		Total	Male	Female	Total	No Days Dis.	1 or More Days	Total	No Days Dis.	1 or More Days	Total	No Days Dis.	1 or More Days	Total	No Days Dis.	1 or More Days	0-4	5-14	15-24	25-44	45-64	65 And Over	0-4	5-14	15-24	25-44	45-64	65 And Over
Diseases of Muscle, Bone and Joint																												
Arthritis and rheumatism	55	59.2	40.9	76.7	31.2	23.5	7.2	59.4	45.6	13.5	9.7	8.8	0.8	17.2	15.9	1.3	0.5	-	5.7	15.0	70.3	139.6	-	1.1	8.9	42.4	123.6	229.2
Back conditions	56	34.8	30.6	38.8	26.4	17.2	8.9	29.5	18.0	11.4	4.2	3.8	0.4	9.3	7.8	1.3	-	1.0	22.3	44.7	41.5	22.3	0.6	3.3	26.8	47.2	38.8	33.6
Other muscle, bone and joint involvement	57	28.4	32.9	24.1	29.7	22.8	6.4	20.5	15.6	4.5	3.2	3.1	0.1	3.6	2.9	0.7	6.0	10.3	26.1	40.2	42.7	41.5	7.0	4.4	15.3	21.3	32.3	45.3
Neoplasms																												
Malignant	60	3.3	2.6	3.9	2.5	1.1	1.4	3.9	1.2	2.1	0.1	0.1	-	0.1	0.1	-	-	0.3	-	1.3	5.8	10.4	-	-	0.5	4.1	5.6	16.1
Benign	61	10.0	5.8	14.0	5.5	3.7	1.8	13.2	8.0	5.1	0.3	0.3	-	0.9	0.8	0.1	-	1.7	7.6	8.2	5.8	9.6	2.3	2.2	8.9	21.9	18.1	10.2
Unspecified	62	5.3	4.6	6.1	3.7	2.4	1.3	5.0	2.9	1.9	0.8	0.8	-	1.1	1.1	-	1.1	0.7	6.4	3.0	4.6	12.0	-	1.8	4.7	7.2	6.2	6.6
Other Specified Diseases																												
Eye conditions including blindness	70-72	25.2	27.4	23.2	25.8	20.9	4.7	20.9	17.8	3.0	1.7	1.6	0.1	2.1	1.9	0.2	11.5	17.1	16.5	20.8	31.0	83.7	15.1	10.2	11.7	15.5	21.9	83.3
Deafness and deafmutism	73	22.3	25.5	19.2	18.6	17.3	1.4	13.6	12.9	0.7	6.9	6.7	0.2	5.6	5.6	0.1	-	7.5	3.2	12.0	30.4	85.3	0.6	4.0	5.8	11.4	20.2	52.6
Other diseases of ear and mastoid	74	12.6	12.8	12.4	11.7	6.3	5.4	10.9	5.6	5.2	1.1	0.8	0.3	1.5	1.0	0.4	22.0	22.6	3.8	7.7	8.0	6.4	21.0	12.0	8.4	10.3	9.5	5.8
Epilepsy	75	1.1	1.1	1.2	1.1	0.4	0.7	1.2	0.7	0.5	-	-	-	-	-	-	1.1	0.7	4.5	0.2	0.6	2.4	0.6	0.4	-	2.3	0.9	1.5
Cerebral palsy	76	0.1	0.1	0.1	0.1	0.1	-	0.1	-	0.1	-	-	-	a	a	-	-	0.3	-	0.2	-	-	0.6	-	-	-	-	-
Late effects of polio	77	3.1	2.8	3.4	2.6	2.1	0.5	3.2	1.9	1.3	0.2	0.2	-	0.2	0.2	-	1.1	3.1	5.7	2.6	2.5	-	1.8	2.6	5.3	3.5	4.1	-
Absence or amputation of member	78	5.9	10.7	1.3	10.3	9.3	1.0	1.1	0.9	0.2	0.4	0.4	-	0.2	0.2	-	-	1.7	7.6	11.4	16.3	29.5	-	-	-	1.4	2.1	2.2
Diseases of central nervous system affecting motion	79	4.3	4.4	4.2	4.3	2.1	2.3	4.0	1.8	2.2	0.1	0.1	-	0.2	0.2	-	1.1	0.3	1.3	2.1	5.8	26.3	-	-	3.7	1.5	5.6	22.6
Anemia NEC	80	23.8	6.1	40.7	5.5	4.5	1.0	39.2	33.5	5.6	0.5	0.5	-	1.5	1.3	0.2	11.5	4.5	1.9	2.6	7.7	9.6	6.4	9.1	54.2	59.2	44.5	31.4
Other diseases of blood forming organs	81	2.6	1.8	3.4	1.6	1.0	0.5	3.2	2.7	0.5	0.2	0.2	-	0.1	0.1	-	2.2	1.4	0.6	1.5	1.2	3.2	2.3	0.7	3.2	4.1	3.3	6.6
Glandular problems	82	11.9	4.3	19.1	4.2	3.5	0.6	19.0	17.4	1.6	0.1	0.1	-	0.1	0.1	-	-	1.7	8.3	4.3	7.4	2.4	-	2.9	23.2	30.0	27.6	6.6
Diabetes	83	5.5	5.1	5.9	5.1	4.0	1.0	5.9	4.6	1.3	-	-	-	-	-	-	-	0.3	-	3.7	11.7	18.3	-	-	1.1	1.9	13.9	27.7
Inflammatory diseases of central nervous system	84	0.7	0.6	0.8	0.6	0.4	0.3	0.7	0.1	0.6	-	-	-	0.1	0.1	-	0.5	0.3	2.5	0.6	0.3	-	-	-	0.5	1.2	0.9	0.7
Neuritis, neuralgia, etc.	85	9.5	6.3	12.5	5.0	3.7	1.3	9.9	7.2	2.6	1.3	1.2	0.1	2.6	2.4	0.2	-	-	1.3	4.9	10.7	14.4	0.6	0.4	0.5	10.4	19.9	27.0
Vitamin deficiency	86	2.3	1.5	3.0	1.2	1.2	0.1	2.8	2.6	0.1	0.3	0.3	-	0.2	0.2	-	-	1.7	1.3	0.9	1.8	1.6	1.2	-	2.1	3.1	3.6	8.0
Congenital malformations	87	4.2	4.5	3.9	4.3	3.2	1.1	3.3	2.3	2.3	0.3	0.3	-	0.6	0.6	-	8.8	5.1	4.5	3.7	3.1	0.8	8.2	3.3	3.2	3.1	2.4	0.7
Skin affections and diseases	88	42.5	41.7	43.3	30.2	25.7	4.4	30.1	27.0	2.8	11.5	11.1	0.4	13.2	12.3	0.9	29.1	22.9	38.9	26.2	37.5	33.5	16.3	18.6	45.8	36.8	28.5	28.5
Results of old accidents	89	22.7	26.9	18.7	22.9	13.6	8.8	15.6	10.7	4.8	4.1	3.5	0.5	3.1	2.9	0.1	1.1	7.5	17.8	30.7	35.0	36.7	0.6	2.6	13.7	17.2	19.6	48.2
Migraine and headache	90	36.8	22.0	50.9	12.2	8.1	4.1	32.2	15.3	16.7	9.8	7.7	1.9	18.7	12.4	5.8	-	2.1	10.8	19.1	20.3	8.8	0.6	3.6	32.1	55.1	41.8	20.4
Mental disturbances	91	6.0	5.6	6.3	5.5	3.0	2.1	5.8	2.9	2.7	0.1	-	0.1	0.6	0.2	0.3	0.5	5.5	4.5	6.9	5.8	8.0	2.3	2.6	6.8	6.6	7.4	8.0
Asthma and hayfever	92	68.6	68.5	68.8	47.9	35.4	12.3	45.2	32.9	11.8	20.6	20.1	0.5	23.6	22.1	1.5	22.5	58.5	71.3	49.4	40.2	46.3	19.8	37.5	50.0	64.0	43.3	24.8
Other allergies	93	40.8	31.7	49.4	26.3	20.8	5.3	38.1	32.5	4.9	5.4	5.2	0.1	11.3	10.7	0.4	47.3	45.2	18.5	18.5	18.7	11.2	49.6	48.9	47.9	42.2	33.8	23.4
Stammering, stuttering and other speech disturbances	94	4.3	6.6	2.1	3.0	3.0	0.1	1.0	1.0	-	3.6	3.6	-	1.1	1.1	-	3.8	6.5	3.8	2.1	1.5	-	0.6	5.8	2.6	1.0	-	-
Overweight	95	8.8	3.7	13.6	3.3	2.9	0.3	11.2	10.3	0.8	0.4	0.4	-	2.5	2.4	-	-	0.7	0.6	3.9	6.1	8.0	-	2.6	6.8	15.7	19.6	14.6
Other	99	0.8	1.3	0.4	1.3	1.0	0.3	0.4	0.4	a	-	-	-	-	-	-	-	0.7	-	1.3	2.5	3.2	0.6	-	-	0.6	0.6	0.7
Symptoms																												
Referable to cardiovascular and nervous system	X0	6.1	5.6	6.6	4.6	3.1	1.5	4.7	2.9	1.7	1.0	0.6	0.3	1.8	1.7	0.2	4.4	2.1	0.6	3.2	5.2	19.9	1.8	1.1	1.1	4.8	9.2	9.5
Referable to respiratory, gastro-intestinal and genito-urinary systems	X1	12.6	11.2	14.0	6.2	5.2	1.0	7.7	6.3	1.3	5.0	4.7	0.3	6.3	5.8	0.4	2.2	8.6	3.8	4.5	7.1	13.6	1.8	3.6	6.8	7.5	10.7	17.5
Other and ill defined symptoms	X2	32.4	20.6	43.6	13.9	10.5	3.2	30.9	24.6	5.8	6.6	6.3	0.4	12.7	11.4	1.2	3.8	5.1	5.1	14.0	20.9	42.3	3.5	2.6	24.7	36.8	48.6	65.0

[1] Accidents starting sometime prior to the four week period preceding the week of interview.

[a] Less than 0.05 per 1,000 persons per year.

[b] Not applicable.

Note: For the interview period May, 1954 - April, 1955.
See "definition of terms" and "method of rounding estimates".
See Appendix D, group coding of ISC classification.

Table 13

NUMBER OF CHRONIC CONDITIONS PER 1,000 PERSONS PER YEAR BY AGE AND SEX, AND EFFECT OF CHRONIC CONDITIONS

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

	Total	Conditions Meeting One or More of Three Criteria[1]	Conditions Not Meeting Any of Three Criteria[1]	CONDITIONS CAUSING LIMITATION[3]						DISABILITY IN PAST 12 MONTHS	
				None	Total	Group 1	Group 2	Group 3	Group 4	No Days	One or More Days
Total, All Ages	960	499	461	808	152	7	30	67	48	725	237
Male	808	408	400	674	134	6	43	49	36	620	191
Female	1,105	586	519	934	169	8	17	84	60	845	260
0-14 Years, Total	377	222	155	351	26	3	3	15	5	236	141
Male	397	231	165	372	24	1	4	13	6	252	145
Female	357	212	146	328	27	4	3	16	4	220	137
15-44 Years, Total	967	465	502	854	113	2	12	56	43	732	233
Male	747	335	412	652	96	2	15	43	36	579	166
Female	1,161	580	581	1,032	127	1	10	67	49	875	286
45-64 Years, Total	1,353	701	652	1,111	240	7	35	106	92	1,076	275
Male	1,135	580	555	915	220	6	57	83	94	894	238
Female	1,564	818	746	1,300	262	8	15	128	110	1,251	311
65 Years and Over, Total	1,986	1,139	850	1,416	570	50	194	208	118	1,589	395
Male	1,821	995	826	1,301	520	43	292	128	57	1,461	360
Female	2,137	1,270	872	1,522	613	55	104	281	173	1,708	428

[1] Condition (a) caused one or more days of disability in past 12 months, (b) causes present limitation of activities, (c) associated with regular or occasional doctor visits.

[2] Group 1 - cannot get around without help. Group 2 - cannot carry on usual activity. Group 3 - can carry on usual activity but must cut down on amount and kind of activities. Group 4 - must cut down on other activities.

Note: For the interview period May, 1954 - April, 1955.
See "definitions of terms" and "method of rounding estimates".

Table 14

HOSPITAL ADMISSIONS AND HOSPITAL DAYS PER 1,000 PERSONS PER YEAR AND AVERAGE DAYS PER ADMISSION BY AGE, SEX AND DIAGNOSTIC GROUP

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	TOTAL	Infective and Parasitic Diseases[1]	Neoplasms[2]	Cardiovascular Diseases[3]	Diseases of Respiratory System[4]	Diseases of Digestive System[5]	Accidents[6]	Other[7]
HOSPITAL ADMISSIONS PER 1,000 PERSONS								
Total, All Ages	93	2	6	5	9	12	9	50
Less Deliveries	71	2	6	5	9	12	9	28
Deliveries[8]	22	-	-	-	-	-	-	22
Male	70	2	3	5	9	14	12	25
Female	114	1	9	4	9	10	7	74
Less Deliveries	72	1	9	4	9	10	7	32
Deliveries[8]	42	-	-	-	-	-	-	42
0-14 Years, Total	41	2	1	-	16	5	6	10
Male	46	1	1	-	17	7	7	12
Female	35	3	1	-	15	3	5	7
15-44 Years, Total	123	1	7	2	5	12	8	87
Less Deliveries	71	1	7	2	5	12	8	35
Deliveries[8]	52	-	-	-	-	-	-	52
Male	63	2	4	2	5	15	12	23
Female	176	1	10	2	6	8	5	143
Less Deliveries	79	1	10	2	6	8	5	46
Deliveries[8]	97	-	-	-	-	-	-	97
45-64 Years, Total	98	1	11	10	6	18	12	39
Male	101	2	5	12	6	18	18	40
Female	94	a	18	7	7	18	6	39
65 Years and Over, Total	109	1	8	21	7	21	17	35
Male	121	1	6	26	6	22	14	47
Female	98	1	11	17	8	20	20	23
HOSPITAL DAYS PER 1,000 PERSONS								
Total, All Ages	881	55	57	80	46	120	158	368
Less Deliveries	797	55	57	80	46	120	158	283
Deliveries[8]	84	-	-	-	-	-	-	84
Male	968	68	56	116	59	137	231	305
Female	798	42	58	45	34	104	89	427
Less Deliveries	634	42	58	45	34	104	89	262
Deliveries[8]	165	-	-	-	-	-	-	165
0-14 Years, Total	229	29	4	-	36	38	31	93
Male	286	20	5	-	42	43	37	142
Female	169	38	3	-	30	34	24	41
15-44 Years, Total	1,000	101	74	30	26	112	165	494
Less Deliveries	798	101	74	30	26	112	165	292
Deliveries[8]	202	-	-	-	-	-	-	202
Male	1,027	134	92	39	34	176	281	278
Female	976	72	58	22	20	56	63	685
Less Deliveries	596	72	58	22	20	56	63	305
Deliveries[8]	379	-	-	-	-	-	-	379
45-64 Years, Total	1,151	16	86	129	84	183	225	430
Male	1,451	31	57	173	131	165	400	493
Female	862	a	114	86	39	200	56	369
65 Years and Over, Total	1,900	11	86	487	88	292	405	536
Male	2,018	17	69	794	69	234	277	575
Female	1,792	5	101	207	106	345	522	500
AVERAGE DAYS PER ADMISSION								
Total, All Ages	9.5	36.3	8.9	17.0	5.2	10.0	17.0	7.3
Less Deliveries	11.2	36.3	8.9	17.0	5.2	10.0	17.0	9.9
Deliveries[8]	3.9	-	-	-	-	-	-	3.9
Male	13.8	42.2	17.4	21.2	6.7	9.7	19.1	12.2
Female	7.0	29.9	6.1	11.5	3.8	10.7	13.4	5.8
Less Deliveries	8.8	29.9	6.1	11.5	3.8	10.4	13.4	8.3
Deliveries[8]	3.9	-	-	-	-	-	-	3.9
0-14 Years, Total	5.6	13.2	3.4	-	2.2	7.1	4.8	9.7
Male	6.2	(13.4)	(1.4)	-	2.5	5.8	5.0	11.7
Female	4.8	13.0	(2.4)	-	2.0	10.0	4.5	6.0
15-44 Years, Total	8.1	70.9	10.2	14.3	4.9	9.6	19.5	5.7
Less Deliveries	11.2	70.9	10.2	14.3	4.9	9.6	19.5	8.4
Deliveries[8]	3.9	-	-	-	-	-	-	3.9
Male	16.3	76.1	25.0	20.2	7.0	11.5	23.1	12.1
Female	5.5	(63.8)	5.5	9.9	3.4	6.7	12.1	4.8
Less Deliveries	7.5	(63.8)	5.5	9.9	3.4	6.7	12.1	6.7
Deliveries[8]	3.9	-	-	-	-	-	-	3.9
45-64 Years, Total	11.7	(14.7)	7.6	13.2	12.9	10.1	18.6	11.0
Male	14.4	(17.0)	12.4	14.1	21.3	8.9	22.1	12.4
Female	9.2	(1.0)	6.4	11.6	5.7	11.2	9.0	9.5
65 Years and Over, Total	17.4	(14.0)	10.3	22.8	12.8	13.7	24.1	15.5
Male	16.7	(21.0)	(12.4)	30.2	(12.3)	10.5	20.4	12.2
Female	18.3	(7.0)	9.3	12.3	13.2	16.9	26.5	21.4

Sixth Revision, International List Numbers:

1 001.0-138.1 (omitting 048.0, 049.0-049.2, 056.1, 081.0-081.9, 083.1-083.3, 085.1, 096.9, 131.0).
2 140.0-239.0.
3 330.0-334.0, 400.0-468.3 (omitting 460.0, 461.0, 467.0), 782.4.
4 470.0, 481.0, 490.0-527.2, 056.1, 085.1, 096.9, 783.3.
5 482.0, 530.0-587.2, 316.0-316.3, 048.0, 049.0-049.3, 784.1, 785.5, 785.6.
6 800.0-999.9.
7 Residual.
8 660.0-660.8, 670.0-678.0.

a Less than 0.5.

Note: For the interview period May, 1954 - April, 1955, covering hospitalizations for May, 1953 - April, 1955.
See "definitions of terms" and "method of rounding estimates".
Underlined figures represent 50-99 admissions.
Figures in parentheses represent 10-49 admissions.
Hospitalization excludes newborn.
Sampling variations not computed for diagnostic groups.

Table 15

HOSPITAL BEDS USED PER 1,000 PERSONS PER YEAR[1] BY AGE, SEX AND TYPE OF HOSPITAL

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

	Total	Community Hospitals[2]	County Hospitals	Federal Hospitals
Total, All Ages	3.4	2.2	0.6	0.7
Less Deliveries	3.1	1.9	0.5	0.6
Deliveries	0.3	0.3	0.1	0.0
Male	3.8	2.0	0.6	1.1
Female	3.1	2.4	0.6	0.2
Less Deliveries	2.5	1.8	0.4	0.2
Deliveries	0.6	0.5	0.1	a
0-14 Years, Total	0.9	0.6	0.3	a
Male	1.1	0.7	0.4	a
Female	0.7	0.5	0.2	a
15-44 Years, Total	3.9	2.4	0.4	1.1
Less Deliveries	3.1	1.7	0.3	1.0
Deliveries	0.8	0.6	0.1	0.1
Male	4.0	1.8	0.3	1.9
Female	3.8	2.8	0.6	0.4
Less Deliveries	2.3	1.7	0.4	0.3
Deliveries	1.5	1.2	0.2	0.1
45-64 Years, Total	4.5	3.3	0.5	0.7
Male	5.7	3.8	0.6	1.2
Female	3.4	2.8	0.4	0.1
65 Years and Over, Total	7.4	4.2	2.6	0.6
Male	7.9	3.5	3.2	1.1
Female	7.0	4.9	2.0	0.1

[1] At the State-wide average of 70 percent occupancy.
[2] Includes University of California Hospital (State).

a Less than 0.05.

Note: For the interview period May, 1954 - April, 1955 covering hospitalizations for May, 1953 - April, 1955.
See "definitions of terms" and "method of rounding estimates".
Hospitalization excludes newborn.
Data refer to hospitalization outside tuberculosis, mental and other institutional facilities of the resident non-institutional population exclusive of persons living on military posts.
Sampling variations, not computed.

Table 16

HOSPITAL ADMISSIONS AND HOSPITAL DAYS PER 1,000 PERSONS PER YEAR AND AVERAGE DAYS PER ADMISSION BY AGE, SEX AND TYPE OF HOSPITAL

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	HOSPITAL ADMISSIONS PER 1,000 PERSONS				HOSPITAL DAYS PER 1,000 PERSONS				AVERAGE DAYS PER ADMISSION			
	Total	Community Hospitals[1]	County Hospitals	Federal Hospitals	Total	Community Hospitals[1]	County Hospitals	Federal Hospitals	Total	Community Hospitals[1]	County Hospitals	Federal Hospitals
Total, All Ages	93	75	11	7	881	562	151	168	9.5	7.5	14.5	23.4
Less Deliveries	71	57	8	6	797	496	138	163	11.2	8.7	17.6	27.9
Deliveries	22	18	2	1	84	67	12	5	3.9	3.7	5.0	(3.9)
Male	70	54	8	9	968	520	162	286	13.8	9.7	22.0	31.7
Female	114	95	13	5	798	602	140	56	7.0	6.3	10.7	10.3
Less Deliveries	72	60	8	3	634	472	116	46	8.8	7.8	14.1	16.3
Deliveries	42	35	5	3	165	130	24	10	3.9	3.7	5.0	(3.9)
0-14 Years, Total	41	33	6	1	229	155	69	5	5.6	4.7	11.0	a
Male	46	38	8	1	286	186	97	2	6.2	4.9	(12.4)	a
Female	35	29	5	1	169	122	39	8	4.8	4.3	(8.4)	a
15-44 Years, Total	123	99	12	11	1,000	602	115	283	8.1	6.1	9.2	24.6
Less Deliveries	71	56	6	8	798	443	85	270	11.2	7.8	13.2	32.8
Deliveries	52	42	6	3	202	159	30	13	3.9	3.7	5.0	(3.9)
Male	63	45	4	13	1,027	460	80	486	16.3	10.2	(20.8)	36.2
Female	176	146	20	10	976	727	146	103	5.5	4.9	7.3	10.6
Less Deliveries	79	66	9	4	596	427	89	80	7.5	6.4	10.2	(21.7)
Deliveries	97	80	11	6	379	300	56	24	3.9	3.7	5.0	(3.9)
45-64, Total	98	82	7	8	1,151	842	134	174	11.7	10.3	18.5	20.7
Male	101	82	6	13	1,451	976	157	317	14.4	11.9	(27.0)	(24.6)
Female	94	81	9	4	862	713	111	37	9.2	8.8	(12.9)	(8.9)
65 Years and Over, Total	109	82	22	5	1,900	1,089	668	143	17.4	13.3	29.7	(31.2)
Male	121	82	30	9	2,018	904	832	282	16.7	11.0	(28.2)	(32.1)
Female	98	82	16	1	1,792	1,258	518	16	18.3	15.4	(32.3)	a

[1] Includes University of California Hospital (State).

a Average days per admission not calculated for less than 10 admissions.

Note: For the interview period May, 1954 - April, 1955 covering hospitalizations for May, 1953 - April, 1955.
See "definitions of terms" and "method of rounding estimates".
Underlined figures represent 50-99 admissions.
Figures in parentheses represent 10-49 admissions.
Hospitalization excludes newborn.
Sampling variations not computed for type of hospital.

Table 17

PERCENT OF PHYSICIAN VISITS FOR ILLNESS
BY AGE, SEX AND PLACE OF VISIT

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	TOTAL	ILLNESSES				
		PLACE OF VISIT				
		Home	Physician's Office	Hospital Clinic	Other Clinic	Other
Total, All Ages	100	9	79	7	4	1
Male	100	7	82	7	4	1
Female	100	11	76	8	5	a
0-4 Years, Total	100	8	76	11	5	-
Male	100	8	77	10	5	-
Female	100	7	76	12	6	-
5-14 Years, Total	100	11	70	13	6	1
Male	100	9	71	14	4	2
Female	100	12	68	11	8	1
15-44 Years, Total	100	3	82	7	7	1
Male	100	2	86	5	6	1
Female	100	3	80	8	8	1
45-64 Years, Total	100	6	85	6	2	-
Male	100	5	89	4	1	-
Female	100	7	83	7	2	-
65 Years and Over, Total	100	29	67	3	1	-
Male	100	21	72	5	2	-
Female	100	33	65	2	0	-

a Less than 0.5.

Note: For the interview period February, 1955 - April, 1955, covering physician visits for January, 1955 - April, 1955.
See "definition of terms" and "method of rounding estimates".
Underlined figures represent between 100-499 persons in sample.
Reports of physician visits are based on 27 percent of the total sample.
Sampling variations not computed.

Table 19

PERCENT OF PERSONS WITH SOME HEALTH
INSURANCE BY AGE AND SEX

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE	Total	Male	Female
Total	52.0	53.0	51.1
0-4 years	48.5	48.1	49.0
5-14 years	52.7	52.7	52.7
15-44 years	56.6	57.2	56.1
45-64 years	54.7	57.4	52.2
65 years and over	25.1	27.8	22.6

Note: For the interview period May, 1954 - April, 1955.
See "definitions of terms" and "method of rounding estimates".
Sampling variations not computed.

Table 18

PERCENT OF PHYSICIAN VISITS FOR ILLNESS BY AGE, SEX AND DIAGNOSIS

CALIFORNIA HEALTH SURVEY

(Figures are subject to sampling variation)

AGE AND SEX	TOTAL	ACUTE CONDITIONS						CHRONIC CONDITIONS					
		Total	Respiratory	Gastro-Intestinal	Other Communicable	Accidents	All Other	Total	Cardio-vascular	Respiratory	Arthritis and Rheumatism	Other Neuro-muscular and Bone Diseases	All Other
Total, All Ages	100	34	12	3	1	6	12	66	7	8	3	4	43
Male	100	38	12	4	1	8	13	62	6	9	2	5	40
Female	100	30	11	3	1	5	11	70	8	7	4	4	46
0-14 Years, Total	100	66	28	7	2	10	19	34	b	8	-	1	25
Male	100	68	28	8	3	7	22	32	-	6	-	1	25
Female	100	63	28	6	1	13	17	37	1	10	-	1	25
5-14 Years, Total	100	53	19	7	7	7	13	47	1	16	b	2	28
Male	100	59	24	5	6	7	17	41	-	12	-	2	27
Female	100	47	14	9	7	8	8	53	2	20	1	1	30
15-44 Years, Total	100	34	10	2	1	7	14	66	2	5	1	6	52
Male	100	39	9	3	1	12	14	62	2	7	2	6	45
Female	100	30	11	2	1	13	13[a]	70	3	3	1	6	57
45-64 Years, Total	100	23	8	2	-	6	8	77	11	8	6	4	47
Male	100	27	7	3	-	6	10	73	11	7	4	6	46
Female	100	21	9	1	-	5	6	79	10	10	9	3	48
65 Years and Over, Total	100	17	5	2	-	1	9	83	23	8	6	5	40
Male	100	13	6	3	-	1	3	87	20	18	6	3	41
Female	100	19	5	1	-	1	12	81	25	4	6	7	40

a Disorders of pregnancy and puerperium - 4 percent.
b Less than 0.5 percent.

Note: For the interview period February 1955 - April, 1955, covering physician visits for January, 1955 - April, 1955.
See "definitions of terms" and "method of rounding estimates".
For diagnostic ISC codes see "group code, classification".
Underlined figures represent between 100-499 persons in sample.
Sample reports of physician visits are based on 27 percent of total sample.
Sampling variations not computed.

o

printed in CALIFORNIA STATE PRINTING OFFICE

61445 9-57 3M